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ABSTRACT

The study describes an exploratory effort to develop procedures and techniques to assess work-relevant affect. A stimulus word list, consisting of 211 words in 10 work and one miscellaneous categories, was tested on 10 female secretaries and 10 male auto mechanics to determine from their single-word responses the hierarchical structure of work environment categories. Since the test did not produce a meaningful associative map of the work environment, the stimuli were converted from single words to 40 phrases in seven categories. The phrase stimuli were tested on 19 male auto mechanics, 19 female secretaries, and 19 computer data processors (14 males) with the aim of deriving stimulus meaning from their multiple word associative responses themselves by means of content analysis. The response distributions for each occupation are discussed in the text and tabularly displayed by stimulus phrases and each of 13 derived response categories. The test results indicate that people associate positive affect with the work environment, which the report considered as general support for a positively valenced work ethic. One-half of the document contains appendixes describing the word association instruments, and the response distributions pooled by stimulant and frequency for each of the two tests. (JR)

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A METHODOLOGY TO ASSESS THE CONTENT AND STRUCTURE OF AFFECTIVE AND DESCRIPTIVE MEANINGS ASSOCIATED WITH THE WORK ENVIRONMENT

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and

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FOREWORD

Assessment of work-relevant affect is a continuing priority in vocational education. Knowledge and understanding of the ways in which workers approach their jobs, their co-workers, and the entire work environment is vital for providing relevant and effective job preparation. These non-technical variables help to determine those aspects of the work-a-day world which are viewed negatively and those which are reasonably rewarding and contribute to the worker's satisfaction and success on the job.

This study was an exploratory effort in the use of word association procedures to assess the affective and descriptive meanings workers associate with their work environments. It was conducted as part of a long-range, programmatic research and development program at The Center, the purpose of which is to develop systematic guidelines and procedures for the derivation of curriculum content. Procedures and guidelines now under development by The Center's "Methods for Curriculum Content Derivation" program will aid developers of vocational curriculum and occupational training programs to accurately identify occupational requirements and to select curriculum content which most warrants formal training consideration.

This report of the methods developed for assessing work-relevant affect, and the initial results of their exploratory use, should be of particular interest to vocational and career educators striving to better provide students with the knowledges and skills to cope with the interpersonal, affective dimensions of work. It should also provide curriculum developers and training directors in vocational education, business, industry, and government with information about and clues for promising approaches to the identification of relevant job content for training. It is especially hoped that the report will stimulate interest and dialogue among vocational researchers and developers, and contribute to the continuation of investigations of alternative approaches to the assessment of work-relevant affect.

Many people have contributed to the work leading to the development of this report. In particular, The Center is inuebted to the authors, Duane Essex, research associate, and Cheng Liu, former research specialist at The Center and currently assistant professor at the State University of New York, Buffalo, New York. The Center also expresses its appreciation to the employers and supervisors of the several businesses and public agencies in the Columbus metropolitan area for their cooperation in the study and to the 29 automotive mechanics, 29 secretaries, and 19 computer data processors who participated in the study.

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Robert E. Taylor
Director
The Center for Vocational Education

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CHAPTER I

IMPORTANCE OF AFFECT AND ITS ASSESSMENT IN CAREER EDUCATION

Affect in Career Education

There is growing awareness among educators and researchers that the affective dimensions of human development must be given more adequate emphasis in career education. Educational programs have traditionally concentrated on the development of cognitive skills and have not adequately emphasized development of the student as a "whole person." Increasingly, students are being recognized as having broad spectrums of developmental needs, including both cognitive and affective needs (King, 1971; Midjaas, 1970; Woolley, 1970).[1] In spite of a lack of general agreement on the definition of affect, affect is viewed as a very important and complex part of human and vocational development that must be understood if career education is to be effective education.

There are two especially important reasons for increasing educational emphasis on the total person. First, there is the recognition that affect and cognition are closely related in the classroom. Some experts even argue that affect and cognition are practically inseparable. As a result, educators now advocate a broader set of educational objectives. Second, job performance has often been found to be a function of certain affective skills and attributes, such as ability to work in close cooperation with others and attitude toward the work performed.

Consequently, research efforts have become increasingly concerned with identifying those work-related affective skills and attributes that are developed in the educational process, especially those that are related to job success; but clear, reliable identification has not yet been attained. Thus, it is imperative that such clear identification be accomplished first in order to provide career educators with initial affective goals.

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[1] It is also possible to distinguish the psychomotor, or behavioral aspect of development from the affective and cognitive dimensions (Krathwohl, Bloom & Masia, 1964). Research has indicated that behavior is an important variable in the development of cognition and affect. For example, Breer and Locke (1965) have shown, in a series of studies, that successful performance of a task will influence a subject's attitude toward that task as well as facilitate the development of concomitant cognitive skills. However, as Fishbein and Ajzen (1972, p. 523) pointed out in a review of the literature, the conditions under which behavioral performance will change beliefs, attitudes, or intentions are still unknown. The relationship of the psychomotor aspect of development to cognition and affect remains, therefore, an important question and is deserving of further research. However, this question was outside the scope of this study which was concerned with the identification and explication of affect and its dimensions. As discussed below, this study included the identification of certain cognitive components but did not attempt to identify related psychomotor components.

Affect and Cognition

A major reason for growing emphasis on the whole person in career education is the awareness that affect is inextricably related to cognition. Although the exact nature of the affect-cognition relationship is not clear, considerable data have been accumulated to indicate that affective development in areas such as interests, attitudes, and values is related to cognitive experience. After summarizing much of the literature concerning attitude formation, Fishbein and Ajzen (1972) concluded that there is widespread agreement that "a person's attitude toward an object is related to his beliefs about it" (p. 507). This is true whether the attitude object is a person, an issue, or a behavior. This correlation between feeling and belief has been supported by research conducted in the classroom and on the job. Leonard (1972) investigated the affective-cognitive consistency of values held by college students and reported a moderate degree of relationship between cognitive and affective components of their attitude structure. In a study at the high school level, Gable and Roberts(1973) found that cognitive and affective variables were correlated and when combined could account for 32% of variation in student grades. Similarly, but in a job-related context, Kazanas and Wolff (1972) summarized research concerning development of work habits in vocational education and concluded that successful vocational students not only demonstrated required psychomotor skills, but also had developed effective work habits such as ability to handle directions, wholesome attitude toward work, pleasing personal manner, poise, and self-assurance. This is an example of what Hartup (1973) pointed out as mounting evidence that academic competence may not be a sufficient condition for enhancement of the student's school success. Finally, at the elementary school level, Kifer (1973) found academic performance to be related to the development of affective traits and pointed out the complex interactions between demands for academic achievement in school and the personal development of the learner. Much of this evidence strongly implies that affective behaviors develop when appropriate learning experiences are provided much the same as cognitive behaviors develop from appropriate learning experiences (Krathwohl, Bloom & Masia, 1964).

Educators have reacted to this growing body of literature by attempting to formulate a new, broader range of educational objectives. They have introduced wholistic concepts such as "confluent education," representing the integration of affective and cognitive elements (Brown, 1971), and "life career development," which includes such career guidance goals as (a) self-knowledge and interpersonal skills, (b) career planning knowledge and skills, and (c) knowledge of the work and leisure worlds (Bingham, 1972). These concepts focus on the need to establish comprehensive educational goals that will help develop both cognitive and affective attributes and skills.

Affect and Job Performance

A second major reason for the increasing focus on the educational development of the whole person is that job satisfaction, general adjustment skills, and attitudes toward work have been recognized as major factors in successful job performance. In a review and synthesis of the literature on occupational adaptability, Sjogren (1971) noted that the adaptability of the worker to a new situation is related to many factors in the work environment other than the ability requirements of the work. These include job satisfaction and attitude regarding such variables as (a) content of the work, actual tasks performed, and control of work, (b) direct supervision, (c) the employing organization and its management, (d) opportunities for advancement, (e) pay and other financial benefits, (f) coworkers, and (g) working conditions. In a survey of 642 workers selected from multiple occupations,

Garbin, Salomone, Jackson, and Ballweg (1970) reported that while 46.7% of the sample identified technological skill as the most difficult thing they had to learn, they also listed interpersonal (19.2%), personal (14.8%) and organizational (4.3%) factors as adjustment obstacles. Kazanas and Wolff (1972) bluntly pointed out that if the worker cannot adjust to the non-technical requirements of the job he is likely to be dismissed.

It is not clear to what extent successful work attitudes and general adjustment skills are a function of the worker's past learning history and to what extent they are a function of the work environment itself. But it is clear that successful job performance depends upon what has been termed a correspondence between the individual and the environment (Dawis, Lofquist & Weiss, 1968) and, just as clearly, that both affective and cognitive variables are involved in that correspondence.

Reflecting this concern, research organizations have begun to explicate affectively-based work problems to which the educator should address himself. The Career Education Development Task Force of the National Institute of Education (1973) hypothesized that the lack of general skills and attitudes was a major work entry problem and identified important research issues such as:

> Present youth attitudes toward work, by socioeconomic, rural-urban, regional, and racial or ethnic groupings, the conditions under which they will or will not work; the extent of their desire to work; what they find to be relevant in work-related education (p. 67).
>
> The sorts of characteristics that employers appreciate in employees; this has become important within the last several decades because of economic shifts from manufacturing and agricultural to public, non-profit service employment. (p. 63).

These concerns emphasize the need to identify and develop those work-relevant attitude and adjustment skills that facilitate the worker's initial job performance. In addition, the report by the Special Task Force to the Secretary of Health, Education, and Welfare (Work in America, 1972) indicates that educators must become aware of existing on-the-job attitudes because discontented workers are a substantial problem in the work environment.

Need to Measure Affect

Broad conceptualizations such as "confluent education" and interpersonal adjustment represent initial reactions to the evidence that affective development is concomitant with technical instruction in the classroom and that there are certain affective, adaptive mechanisms which facilitate job entry and success. But, little empirical evidence is available to identify the particular affective changes that occur in the classroom. Furthermore, little hard data are available concerning those affective attributes and skills that are actually used by workers in the course of successful job performance.

There are, however, some research findings that begin to outline the more general affective factors involved in both school and job adjustment. For example, Pucel (1972) reported that student interest and personality were related to the successful training of post-secondary vocational and technical education students. Walther (1970) reported the factor analysis of a self-report inventory that

was constructed to measure work-relevant attitudes. Optimism, unsocialized attitudes, and self-confidence emerged as three important work-relevant attitudes. Rosen (1972) reported the reinforcer characteristics of 67 occupations, based on the responses from over 2000 workers, and predicted job success on the basis of the degree to which the individual's work personality matched the work environment. Work personality included such affective dimensions as a worker's feeling about recognition, authority, autonomy, co-workers, and responsibility.

However, more specific and systematic data are needed. Affective objectives require clear goals which in turn require detailed information concerning work-related affective components. Without clear-cut behavioral objectives, educational goals are often discarded (Wight, 1971). Thus, an instrument sensitive to multiple components of affect is needed, one which will outline the spectrum of affect that an individual assigns to the environment: an instrument that will indicate the affective meaning of the environment.

Affective Measurement

The lack of appropriate measurement techniques to assess the range of affective meaning assigned to the work environment has been a barrier to a concise delineation of the affective skills needed by workers. One reason for this is the complexity of the affective domain, and its intrinsic relation to the cognitive domain. The ties between the two domains make it difficult and, perhaps, inadvisable to measure components of affect only, as existing instruments usually do. An appropriate measure should reveal the pattern of affectivity and the relationship of that pattern to the cognitive domain. A second reason for the above mentioned barrier is the lack of agreement at present on what in the affective domain should be assessed. A third reason is that, because affective development has traditionally been considered outside the scope of school-based education, there has been little impetus to assess affective changes that are related to classroom instruction. While this dated view is changing, there remains the problem of ensuring that relevant dimensions of affect are developed and assessed in the classroom and at work. Each of these three reasons for the lack of an appropriate technique or procedure to assess affect is discussed below.

Complexity of Affect

While some definitions of affect have been limited to "a general evaluation or feeling of favorableness toward the object in question" (Fishbein & Ajzen, 1972, p. 493), a more global, multifaceted definition is generally attempted. For example, Roberts (1972) stated that affective education attempts to educate the emotions and listed personal awareness, creative behavior, interpersonal awareness, subject orientation, and affective styles of learning as some important categories to consider when planning affective experiences in the classroom. This latter approach is an attempt to exhaustively outline the affective domain. Perhaps the most comprehensive and concise example of this approach is Krathwohl, Bloom, and Masia's (1964) attempt to derive a taxonomy of affective educational objectives. They included five categories of affect and gave examples of educational objectives and test items which illustrate each category. These categories and their subdivisions are:

1.0 Receiving
- 1.1 Awareness
- 1.2 Willingness to receive
- 1.3 Controlled or selected attention

2.0 Responding
- 2.1 Acquiescence in responding
- 2.2 Willingness to respond
- 2.3 Satisfaction in response

3.0 Valuing
- 3.1 Acceptance of a value
- 3.2 Preference for a value
- 3.3 Commitment (conviction)

4.0 Organization
- 4.1 Conceptualization of a value
- 4.2 Organization of a value system

5.0 Characterization by a value or value complex
- 5.1 Generalized set
- 5.2 Characterization

These categories approximate a continuum of affect under the organizing principle of internalization. Krathwohl et al. (1964) defined internalization as a "process through which there is at first an incomplete and tentative adoption of only overt manifestations of the desired behavior and later a more complete adoption" (p. 29).

Krathwohl et al. (1964) emphasized the fundamental unity of the person and noted that their attempt to delineate the affective area separately from the cognitive was not intended to suggest that there was a fundamental separation: "There is none" (p. 45). They listed examples of cognitive overlap with each category of affect and noted that educational goals in one domain can be viewed as a means to the attainment of a goal or objective in the other. "In some instances we use changes in the cognitive domain as a means to make changes in the affective; e.g., we give the student information intended to change his attitude. In other instances we use an affective goal as a means to achieve a cognitive one; e.g., we develop an interest in material so the student will learn to use it" (Krathwohl et al., 1964, p. 54). Focusing on the environment, Wight (1972) further pointed out the complexity of affect by indicating the multiple objects of affect found in education: self, others, society, learning, work, leisure time, aesthetics, the natural world, and life. In addition, Wight noted that affect is present with cognitive and psychomotor activity.

Thus, it can be argued that any method purporting to measure affect must be addressed to a multifaceted domain. However, present methods are often based on a unitary conception of affect such as the positive or negative evaluation (usually termed attitude) associated with some psychological object (e.g., Fishbein & Ajzen, 1972; Murray, 1971; Edwards, 1957). Although the semantic differential technique (Osgood, Suci, & Tannenbaum, 1957; Osgood, 1969) was devised to measure multiple dimensions of affect, it has generally revealed only the primary factor of evaluation and the secondary factors of potency and activity. Neither the methods based on a unitary conception of affect, nor the semantic differential technique, attempt to relate subjects' responses to the cognitive domain.

Affective Skills and Career Goals

A second reason for the lack of methodology and instrumentation to measure affect is that there is little agreement on what should be assessed: there is little agreement on what affective skills a worker actually needs to facilitate his interaction with the work environment. As Brandes (1973) pointed out, lack of agreement on educational goals has always been problematic in traditional subject areas, but is much more problematic in establishing goals relative to such affective components as interests, attitudes, and values. For example, when the teacher wishes to prepare students to effectively make the interpersonal, personal, and organizational adjustments to work that Garbin et al. (1970) reported as normal work entry problems by what criteria can the teacher decide between (a) development of self-knowledge and interpersonal skills, as part of Brown's (1971) concept of life career development, or (b) development of optimism, socialized attitudes, and self-confidence, the three important work-relevant attitudes empirically derived by Walther (1970)? Although it could be argued that both concerns should be a focus for the teacher, it is clear that job-related affective skills need sharp empirical definition before agreed-upon affective objectives are established. Consequently, an instrument is needed which will clearly define and assess the affect associated with career development needs.

Affect Measurement and Ethics

A third important reason for the lack of techniques and instrumentation designed to measure the affective domain was given by Tyler (1973):

> There are two main principles that should be carefully considered in reviewing proposed objectives in the affective domain. One is the political principle that the function of the school in a democratic society is to help the student gain the means for increasing independence in judgments and action, and not to indoctrinate particular political or sectarian views. The other is the ethical principle that each individual has a right to privacy not to be invaded by the school. (p. 3)

Tyler noted that the school must be prepared to justify every major objective in terms of values widely accepted by the lay public or expressly stated in the constitution and statutes, and he cited the National Assessment Project report (e.g., "ethical and dependable in work, school, and social situations," Tyler, 1973, p. 6), as an example of socially approved affective goals. An example of this position is represented by the Utah State Board of Education (1971) which adopted only those affective objectives that had social justification. The board issued a prospectus which identified basic social values, behaviors, and understandings and developed two purposes: (a) to guarantee the relevancy of programs for each student, and (b) to provide a usable pattern for an organization by which each teacher can assist students in building better citizenship.

It is clear that ethical considerations should continue to guide instrument development. Therefore, it is necessary that assessment of affect be focused on those skills that prepare the student to successfully cope with the work environment and increase the independence and "freedom of the individual to make his own choices, to develop his own belief system, and to experience and express his own feelings" (Tyler, 1973, p. 4).

Careful selection of educational objectives, cognitive or affective, should be followed by further research. For example, Krathwohl et al. (1964) pointed out that research should continue and should be directed toward understanding the underlying process by which individuals undergo change in the affective domain, and toward continued questioning, by philosophers as well as behavioral scientists, as to what changes are desirable and appropriate. Further, Krathwohl et al. (1964) noted that "if we obscure the objectives in the affective domain and bury them in platitudes, how can we examine them, determine their meaning, or do anything constructive about them" (p. 91)?

Thus, the complexity of affect and the need to account for its relation to cognition, the lack of agreement on what are work-relevant affective skills, and ethical concerns over the violation of civil rights have all combined to inhibit development of much needed methods to accurately measure the dimensions of affective and cognitive meaning that workers assign to the work environment. What is needed is a set of systematic techniques and methods that will identify and assess (a) the multiple dimensions of work-related affect and their relation to the concomitant cognitive meanings of the work environment, (b) those affective dimensions relevant to career success, and (c) affective dimensions which facilitate self-development. The development of a viable methodology to meet these goals was the focus of the present investigation.

Word Association and Assessment of Affect

Self-report procedures are probably the most widely used and most successful methods of determining the nature of affect associated with the work environment (Tyler, 1973), and workers who are satisfactorily performing their jobs are probably the best source of information. Given the broad methodological goals of this investigation, the word association paradigm seemed a most appropriate method of self-report. Past research has indicated that word associations represent a broad semantic range of both affective expressions toward and cognitive descriptions of a stimulus. Moreover, research findings indicate that the specific associative response domain (e.g., the work-related associative domain) from which responses are elicited can be partially determined by the instructions given to subjects in a word association task. Also, various dimensional analyses of word association responses have been used to define and map the interrelationships between multiple semantic components. These various issues are discussed below and it was proposed that the present investigation use word association procedures to identify the multiple components of affect which workers associated with their work environment.

Affect and Cognition in Associative Responses

Associative techniques, in which the subject must respond to a stimulus by giving the first word, image, or thought that occurs to him, have been used successfully in explicating both affective and cognitive mental processes. As early as the end of the 19th century in Germany, Wundt introduced associative techniques into his psychological laboratory in an attempt to explore mental processes. Another of the earliest systematic uses of word association to study affective processes was stimulated by the psychoanalytic movement. Jung (1910) described an associative method in which selected stimuli, which would elicit responses from underlying "emotional complexes," were presented to subjects. This approach to identifying affective dimensions was further developed by Rapaport, Gill, and Shafer (1946) to analyze such characteristics as proportion of common or popular

responses, reaction times, and associative disturbances in an attempt to detect those emotional conflicts which impaired thought processes. More closely related to the present study, Wyman (1925) used a word association technique to appraise interest and attitudes among gifted children, responses being scored with reference to "intellectual interest," "social interest," and "activity interest." More recently, Terwilliger (1964) used free association responses to predict affect. Pollio (1963) argued that the broad psychological meaning of a stimulus word is a function of its conditional or affective meaning and that associations will, in part, reflect that meaning.

The predominant use of associative techniques has been to reveal the more cognitive aspects of stimuli in which associations are viewed as objective or denotative descriptions and affective responses usually comprise a small proportion of the total responses (e.g., Nunnally & Hodges, 1965; Laffel & Feldman, 1962). Research in the cognitive domain has indicated that a wide range of descriptive associations are elicited by most stimuli.

Restricting the Associative Domain

Associative techniques have been used to explicate specific psychological domains. Jung (1910) and Rapaport, Gill, and Shafer (1946) selected stimuli that had relevance to the psychoanalytic framework and elicited responses appropriate to the psychosexual development of the subject. In addition to the stimuli used, instructions given to subjects have been successful in modifying associative responses. For example, Horton, Marlowe, and Crowne (1963) found that instructions to subjects to give words that "most people would give" increased the number of responses when compared to the performance of subjects under conditions of standard instructions.

Analysis of Word Associations

It has been suggested that associations derive in whole or in part from structures or categories of mental processes (Deese, 1962). It is usually true that associations exist in well-organized and, in some instances, tightly organized networks. This has been true in studies of free recall data (Deese, 1960), associative clustering (Jenkins & Russell, 1952), and category clustering (Bousefield, 1957). Indeed, dimensional analysis techniques such as hierarchical cluster analysis (Henley, 1969) or factor analysis of matrices of associative response overlap measures (Rotberg, 1968) have outlined multiple semantic dimensions of particular association networks. Such studies provide support for the conceptualization of multiple systems or substructures within the associative domain and suggest that such structures can be identified.

Use of the word association paradigm seemed germane to the present research goals. The use of appropriate stimuli and instructions should elicit a wide range of associations from workers concerning the affective and cognitive meaning of the work environment, and dimensional analysis should reveal the pattern of relationships between affective and other cognitive components. Accomplishment of these goals would provide educators, curriculum developers, and researchers in education with a methodology to identify the interests, attitudes, and values that are associated with success in career education programs and on the job.

Focus of Present Investigation

The present study was primarily an exploratory effort to develop procedures and techniques to assess work-relevant affect. It was not an attempt to systematically apply those methods to identify and measure the spectrum of affective meanings and skills needed by the worker to ensure job success. More specifically, this effort was confined to questions and hypotheses concerning the efficacy of certain word association procedures to reveal the patterns of affect and cognition that workers assign to their environment. The present study was, therefore, limited in the sense that it would not complete the bridge needed between awareness of the importance of affect in career education and the establishment of clear affective objectives in the classroom. In the final analysis the concerned educator or curriculum developer must place this information in a coherent theoretical framework which accounts for the positive or negative affect that emerges from person-environment interaction. It is only then that they can begin to formulate the learning experiences necessary to achieve important affective objectives in the classroom.

CHAPTER II

STIMULUS WORD LIST DEVELOPMENT

It was essential to this investigation that the list of stimulus words presented to workers be representative of a comprehensive list of factors or categories within the work environment. This chapter reports the guidelines used and the development of such a stimulus word list. The stimulus word list subsequently was used in the conduct of two related studies.

Selection Criteria

The first criterion for including a word in the stimulus word list was that it be work-related in its meaning. To select appropriate stimulus words for the studies, work was defined as an activity in which people usually engage for pay, that is central to personal development and total life adjustment, and that is a situation for satisfying needs (Lofquist & Dawis, 1969, p. 11).

A second criterion was that stimulus words be in the noun form wherever possible. Verb and adjective forms were used to supplement nouns when they more clearly communicated a work-related meaning. There were two reasons for emphasizing the noun form in stimulus word selection. First, the noun form was felt to provide the clearest labeling of entities within the work environment and to be less ambiguous to subjects. Second, nouns elicit primarily paradigmatic associations, associations in which the stimulus and response fit a common grammatical paradigm (Cramer, 1968, pp. 68-71; Deese, 1962, pp. 103-105). This grammatical homogeneity removes some ambiguity of meaning attached to responses.

A third criterion was that each stimulus word be representative of an empirically-based work factor or work category related to job attitudes.

Work Categories

In a review and summary of some 150 studies, Herzberg, Mausner, Peterson, and Capwell (1957, pp. 31-42) identified the following ten major on-the-job categories (listed in order of the number of times each was mentioned in the reviewed studies):

Intrinsic Aspects of Job: Including all of the many aspects of the work itself, aspects which would tend to be constant for this work regardless of where the job was performed.

Supervision: Including relationships of the worker with his immediate supervisors.

Working Conditions: Including physical aspects of the environment.

Compensation: All sources of reward other than interpersonal, including the following subcategories: Pay, consisting of wages and any other financial return for hours worked; and Benefits, consisting of monetary and other objective rewards not directly associated with the wage earned.

Promotion: Including sources of betterment of economic position, organizational stature, or professional standing.

Security: Including prospects of continuous employment and adequate income.

Company and Management: Including aspects of the worker's immediate situation which are a function of organizational administration.

Social Aspects of Job: Including relationships of worker with other employees.

Communication: Including aspects of the job situation involving the spreading of information in any direction within the organization.

Benefits: Including policies that prepare the worker for emergencies, illness, old age, and hospitalization, holidays, leave, and vacation.

This list of work categories was felt to be largely representative of categories reported by numerous subsequent investigations (Roach, 1958[2]; Vroom, 1964; Scott, 1967; Robinson, Athansiou, & Head, 1969). However, the Communication category did not prove to be highly replicable (Peay & Wernander, 1969). Further, Roach (1958) and Beer (1964) both reported evidence of a factor they called "basic need satisfaction" that appeared to overlap the Herzberg et al. (1957) "intrinsic aspect of the job" factor, and to incorporate their "social aspects of job" and "security" factors. Roach (1958) also reported several work factors, including those factors labeled "co-workers," "job-security," "freedom from work rules," "pride in company," and "development and advancement." These factors were, in essence, reported by Beer (1964) under a different descriptive framework. Specifically, Beer (1964) investigated the relationships among four leadership climates, motivation, perceived opportunity, and actual satisfaction of a hierarchy of needs as described by Maslow (1954). This hierarchy of basic needs includes:

Security: The desire for a predictable, structured, and reliable environment. The desire for "fairness" and a familiar non-threatening environment.

Social: The desire for belonging. The desire for association, for acceptance by one's fellows, for giving and receiving friendship and love.

Esteem: The desire for reputation or prestige (defining it as respect or esteem from other people), status, dominance, recognition, attention, importance, or appreciation. A desire for esteem from others.

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[2] Since the preparation of this report Roach and Davis (1973) have essentially replicated Roach's 1958 study. This provides further support for relative in-variance of the work categories used to outline the work environment in the Roach (1958) report.

Autonomy: The desire for independence and freedom. The desire for achievement, competence, mastery, adequacy, and confidence. The desire for self-esteem based on one's own opinion of oneself as reflected in the specific aspects just listed.

Self-actualization: The desire to realize one's own potential. The desire for growth and self-development, and the desire to become everything that one is capable of becoming.

A factor analysis of Beer's variables indicated that the Maslow needs emerged on separate factors. Beer's results support the Roach (1958) findings that needs can be considered as separate factors and the Maslow framework provides a concise descriptive underpinning.

It was decided, therefore, to eliminate Communication as a separate category and to include a General Need Satisfaction category with subcategories corresponding to the Security, Social, Esteem, Autonomy, and Self-Actualization needs outlined by Maslow. The General Need Satisfaction category therefore incorporated the Herzberg et al. (1957) factors of "social aspects of the job" and "security" and, to some extent, their "intrinsic aspects of the job" factor. In addition, examination of the remaining aspects of work found within the "intrinsic aspects of job" factor indicated that such aspects fit Vroom's (1967, pp. 236-252) description of "job content." Therefore, a Job Content category was established, along with the subcategories suggested by Vroom, which replaced the Intrinsic Aspects of the Job category:

Job Content: All of the intrinsic aspects of the work itself (but not including those aspects identified by Beer, 1964) including the following subcategories: Job Level, Specialization and Perceived Complexity of Tasks, Control of Methods Used on Job, Control of Work Rate, Skills and Abilities of Workers, Success and Failure in Performance of Job, and Task Components of Job.

Hours of Work was considered to be a separate category from Working Conditions. It seemed reasonable that, since a worker spends approximately one third of each day at work, working hours could be treated as a separate work factor. A Miscellaneous category was also added, and the "Company and Management" factor was broadened to create the category Company and Union.

From a variety of literature defining and describing the work categories, a sample of words representative of each category was identified and edited for inclusion in the initial stimulus word list. No attempt was made to equate the number of different words among categories, only to ensure that the list was representative of those aspects of work described by the categories. The resulting number of stimulus words varied from four words in the Promotion category to 18 words in the Supervision category. The initial stimulus word list consisted of 178 different words distributed among the 14 work categories.

Review

The stimulus words, listed by category heading, were reviewed by a nine-member panel of experts in educational psychology, industrial psychology, counseling psychology, manpower training, engineering, and vocational education. All reviewers were instructed to independently (a) examine

the words in the list and line-out those words (or categories) deemed inappropriate, and (b) to add any additional words (or categories) that would communicate work-related meaning. Each reviewer was further urged to add any general comments about the stimulus word list.

The revised stimulus word list is presented in Table 1. The revised list includes 211 words distributed among 10 work categories and a Miscellaneous category. Two new categories of words were added as a result of reviewer inputs:

Attributes of Workers: Included those descriptions of work-related traits appropriate to to a wide range of occupations.

Adjectives: Those adjectives representative of the dimensions of affect ordinarily measured by the semantic differential technique (e.g., Osgood, Suci, & Tannenbaum, 1957). This included the evaluative (e.g., good-bad), potency (e.g., strong-weak), and activity (e.g., active-passive) dimensions.

While the Adjectives category was not considered a work category per se, it was added to the list because it was felt that it could provide a relatively simple match of affect level (as defined by the adjective stimulus) with work dimensions (as defined by associative responses).

The revised stimulus word list was the source of a sample of stimulus words selected for use in the first of two studies, Experiment I. Three judges were instructed to read the definition of each category of work and to reach 100% agreement on the minimum number of stimulus words within each category necessary to be representative of the category. The entire Adjectives category was included in the stimulus word list to permit investigation of the notion that associative responses to adjectives would directly link affect with appropriate dimensions of the work environment. Table 2 presents the stimulus word list selected for use in Experiment I.

Table 1
Total Stimulus Word List

Job Content							
Job Level or Occupational Status	Specialization & Perceived Complexity of Tasks	Control of Methods Used on Job	Control of the Work Rate	Skills and Abilities of Worker	Success & Failure in Performance of Job	Task Components of Job	Hours of Work
status[a]	specialize	control	regulate	skill[a]	accomplishment	task	working hours
job title	specialist[a]	assist	production[a]	competence	achievement	function	shift assignment
rank	boredom[a]	initiate	quantity	ability	success[a]	maintain	day shift
position	variety[a]	obedience	pressure	intelligence[a]	failure[a]	assignment[a]	night shift
role	challenge	contribution[a]	speed	capability	effective	write	leisure
	ease	plan	tension	experience	ineffective	inspect	coffee break[a]
	repetition[a]	choice	capacity	performance	hindrance	calculate	fatigue
	simple	influence[a]	quality	education	finish	arrange	overtime
	interest	suggestion[a]	relaxation[a]	training	prevent	replace	
	difficult	initiative[a]	work pace[a]	knowledge[a]	interruption	interpret	
	concentrate	interference[a]	schedule[a]	understanding	defeat	duties[a]	
		decision[a]	influence[a]		progress		
					mistake		
					fault		
					interference[a]		

Note—Stimulus word category definitions are presented on pp. 11-13.

[a]Experiment I stimulus words

Table 1 (cont'd)

Work Conditions	General Need Satisfaction					Compensation	
	Security	Social	Esteem	Autonomy	Self-actualization	Pay	Benefits
noise[a]	security[a]	co-worker[a]	esteem	freedom[a]	potential	pay(income)[a]	benefits
surroundings	seniority[a]	group	reputation[a]	autonomy	growth	money	per diem
temperature	familiar	team	recognition	confidence[a]	self-fulfillment[a]	pay raise[a]	bonus[a]
lighting[a]	retirement[a]	join	appreciation	independence	self-expression	overtime	sick pay[a]
tools	protection	belonging	dominance	free	goal	reward	vacation[a]
equipment[a]	insurance	alone	admiration	self-respect	become	cost of living	holiday
parking	pension[a]	morale	attention	dignity	motivation	wealth	
convenience	layoff[a]	friendship	pride[a]	self-reliance[a]	desire		
safety	dismissal[a]	cooperation[a]	self-respect[a]		be		
supplies		acceptance			satisfaction[a]		
cleanliness[a]		conformity					
working environment		trust					
		friend					
		depend					
		prejudice[a]					

[a]Experiment I stimulus words

Table 1 (cont'd)

Promotion	Supervision	Company and Unions	Attributes of Worker	Adjectives			Miscellaneous
				Activity	Potency	Evaluation	
merit	supervisor	company	personality[a]	fast[a]	efficient[a]	good[a]	absenteeism[a]
promotion[a]	supervision[a]	union[a]	judgment[a]	slow[a]	inefficient[a]	bad[a]	satisfaction[a]
advancement	fairness[a]	management[a]	intelligence[a]	complex[a]	hard[a]	safe[a]	active
upgrade	discipline[a]	company policy[a]	initiative[a]	simple[a]	soft[a]	dangerous[a]	passive
pay raise[a]	reprimand[a]	union dues	health[a]		powerful[a]	sociable[a]	accident
	praise[a]	steward	mature[a]		weak[a]	unsociable[a]	customer[a]
	counsel	administrator	alert[a]			meaningful[a]	
	represent	contract	consistent[a]			meaningless[a]	
	boss	rules	responsible[a]				
	delegates	communication	flexible[a]				
	order	lay-off	industrious[a]				
	request	dismissal[a]	job knowledge[a]				
	foreman	negotiation[a]	loyalty[a]				
	subordinate	grievance[a]	willingness[a]				
	democratic		confidence[a]				
	permissiveness						
	autocratic						
	dictates						

[a]Experiment I stimulus words

Table 2
Work-Related Stimulus Words Used in Experiment I

1. absenteeism
2. assignment
3. bonus
4. boredom
5. cleanliness
6. coffee break
7. company policy
8. confidence
9. contribution
10. cooperation
11. co-worker
12. customer
13. decision
14. discipline
15. dismissal
16. duties
17. equipment
18. experience
19. failure
20. fairness
21. fatigue
22. freedom
23. grievance
24. influence
25. initiative
26. intelligence
27. interference
28. job knowledge
29. job title
30. judgment
31. layoff
32. lighting
33. loyalty
34. management
35. morale
36. negotiation
37. noise
39. pay
40. pay raise
41. pension
42. personality
43. praise
44. prejudice
45. pride
46. production
47. promotion
48. recognition
49. relaxation
50. repetition
51. reprimand
52. reputation
53. retirement
54. satisfaction
55. schedule
56. security
57. self-expression
58. self-fulfillment
59. self-reliance
60. seniority
61. sick pay
62. skill
63. specialist
64. status
65. success
66. suggestion
67. supervision
68. temperature
69. tension
70. training
71. union
72. vacation
73. variety
74. willingness
75. working hours
76. work pace
77. alert
78. bad
79. complex
80. consistent
81. dangerous
82. efficient
83. fast
84. flexible
85. good
86. hard
87. industrious
89. mature
90. meaningful
91. meaningless
92. powerful
93. responsible
94. safe
95. simple
96. slow
97. sociable
98. soft
99. unsociable
100. weak

CHAPTER III

EXPERIMENT I

The use of word association procedures to determine the psychological meaning, especially the affective meaning, of objects within the work environment requires that: (a) stimulus words be representative of the work environment, (b) responses be representative of the range of psychological meaning workers assign to objects in their work environment, (c) above all, responses include those of an affective nature, and (d) responses can be used to derive associative maps of stimuli which reveal the dimensionality of the work environment and provide a context for content analyses of response distributions.

Meaning in Word Association

In a relatively unstructure or free word association task, stimulus words can be expected to elicit a wide semantic range of affective and descriptive responses, including syntagmatic and paradigmatic responses (Nunnally, Flaugher & Hodges, 1963; Cramer, 1968, pp. 188-190). Syntagmatic responses are responses given on the basis of associative contiguity. The fact that we do form associative connections between two psychological processes that occur together in time or in immediate succession is well-documented (Deese, 1965, p. 7). Paradigmatic responses are based on conceptual, mediated relationships and represent more structural associations, e.g., indication of the stimulus as a subordinate entity. For the present investigations of psychological meaning, paradigmatic responses were considered to be more desirable than syntagmatic responses, a result which appears to be primarily a function of the instructions given to respondents.

Instructions

The instructions given to subjects in a word association task will influence or restrict the semantic level of response. For example, Kreitler and Kreitler (1968) reported that, when subjects were instructed to give either lexical or symbolic responses to varied stimuli, there was less than 10% semantic overlap between the two respective groups of responses. Cramer (1968) reported that instructions could successfully activate either a particular semantic category or, less restrictively, establish broad "response sets" (pp. 91-98).

Associative Maps

With regard to interpretation of response distributions, there is evidence that a meaningful stimulus word dimensional structure can be derived from word association responses.

Three investigations (Smith, 1968; Pratzner, 1969; Liu, 1972) have demonstrated the use of worker responses to develop meaningful maps of the associative relationships among occupationally specific stimulus words. The associative maps subsequently were used to successfully differentiate two independently identified groups of electronic technicians who could and who could not repair a wide range of equipment.

Research Questions

The word association paradigm was, therefore, considered to be a viable approach to investigate the psychological, including the affective, meaning of aspects of the work environment. Within this paradigm an investigation was conducted to attempt to answer the following major questions:

1. In a continued word association format, can single stimulus words elicit a wide semantic range of responses?

2. Can instructions be used to place the stimulus words in a work-related context and the subjects in an affective response set, resulting in a decrease of contiguous, or syntagmatic, responses without seriously restricting the semantic range of paradigmatic responses?

3. Can the overall psychological structure of the work environment be determined from a hierarchical dimensional analysis of the stimulus words; and, further, can this dimensional structure be used as a contextual guide to interpret the meaning of responses to individual stimuli?

Method

Subjects

Subjects were 10 automotive mechanics (all males) and 10 secretaries (all females) employed in the metropolitan Columbus area. Ages ranged from 20 to 54, and all subjects had been employed for one or more years within their occupation. Automotive mechanics were sampled from three separate automotive repair garages with sample sizes of 5, 4, and 1, respectively. All secretaries were sampled from various divisions of The Center for Vocational Education, The Ohio State University, in sample sizes of 3, 3, 2, and 2, respectively.

Materials

Single-word format.[3] As discussed in Chapter II, 100 stimulus words, 76 nouns and 24 adjectives, were selected from the total stimulus word list with the restriction that they be representative of all work categories and that the entire Adjectives category be included. The 100 stimulus words

[3] See Appendix A for an example of the single word format data collection instrument.

were then placed in a continued-association format by printing each word in a column 15 times on a single sheet of 8½" x 11" paper, each repetition followed by a blank line as follows:

task_____

task_____

task_____

task_____

etc.

Ten booklets of 100 pages each (i.e., one page for each of the one hundred stimulus words) were then collated, each in a different random order. The first page of each booklet contained a completed example of the word association task and brief directions to be read aloud by the experimenter.

Sentence-stem format.[4] The 76 nouns in the single-word format were used to construct sentence-stems as follows:

a task is_____

a task is_____

a task is_____

a task is_____

etc.

The booklets using the sentence-stem format were assembled in the same manner as the single word booklet. Stimuli from the Worker Attributes and Adjectives category were not appropriate for this format.

Procedure

Data collection. Within each occupation, subjects were randomly assigned, five per group, to either the singe-word or the sentence-stem condition, resulting in a 2 x 2 occupation-by-format matrix:

[4]Data will not be reported separately here for the sentence-stem and single-word formats. Data analyses reported in this chapter are based on the associative responses pooled across both formats. The reader is referred to Appendix A for a discussion of the relative efficiency of the sentence-stem format, when compared to the single-word format.

Occupation	Format: Single-word	Format: Sentence-stem
Secretarial Science	n=5	n=5
Automotive mechanics	n=5	n=5

Figure 1. Research Design for Experiment I

Subjects were instructed to consider the stimulus words (sentence-stems) in relation to their work. In addition, subjects were told to write those responses that best expressed what each stimulus word (sentence-stem) meant to them and how they felt toward the aspect of the work environment the stimulus word (sentence-stem) represented. All subjects were asked to limit their responses to single words, but subjects in the sentence-stem condition were allowed to use the words "a" or "an" as a preface to their response. Subjects were told to write as many different responses as they could in the time allowed for responses to each stimulus word. A tape-recorded, 500 Hz tone sounded at 50 second intervals to signal the subject to stop writing, turn the page, and begin writing responses to the next stimulus word (sentence-stem). Subjects in the single-word condition were given a short rest approximately halfway through the task. Following completion of the task, all subjects were given details of the purpose of the experiment, and the experimenter answered any subsequent questions.

Data analysis. The RCMAT computer program (Mead, 1972) at The Ohio State University was used to calculate stimulus word overlap matrices. This program is essentially a modification of the Relatedness Coefficient (RC) technique developed by Garskof and Houston (1963). The RC is a measure of verbal relatedness between two stimuli. Mead's computer program permits pooling of responses across subjects before calculating stimulus word overlap. The pooled overlap measure considers the frequency of response words, the number of shared response words, and the rank order of response words. The output of the RCMAT program is a stimulus-by-stimulus RC matrix that can be reduced by various dimensional analyses (e.g., factor or cluster analysis).

As a first analysis, an RC matrix was obtained using data based on the pooled responses of all 20 subjects, excluding idiosyncratic responses (i.e., responses to each stimulus given by only one subject). The analysis included only the 76 stimuli common to both the single-word and the sentence-stem format. This matrix was then reduced by the Wherry-Wherry II Hierarchical Factor Analysis program (Harmon, 1967) available at The Ohio State University.

Following this, a content analysis was made on the pooled responses given by all subjects to the 76 stimuli common across both formats. This again included all responses given to each stimulus, by two or more subjects (i.e., excluding idiosyncratic responses).

Results and Discussion

Factor Analyses

Figure 2 summarizes the results of the hierarchical factor analysis. It includes those items that loaded ≥ .2956 on the General, Secondary, and Primary factors. It was apparent that the hierarchical factor analysis did not reveal a clear dimensional structure. Some factors appeared to be interpretable while others did not. For example, Primary Factor 4 in Figure 2 appeared to be the Compensation category listed in Table 1. Also, the Primary Factors 1 and 3 in Figure 2 appeared to combine the Skills and Abilities and the Attributes of Worker categories of Table 1. However, Secondary Factor II and Primary Factors 6 and 7 did not lend themselves to interpretation. Therefore, the usefuiness of the factor solution to outline the structure of the work environment and to provide a context for interpretation of the meaning characteristic of each stimulus word response distribution was limited.

Content Analysis

A content analysis of the pooled response distributions was undertaken in an attempt to both clarify the factor structure and determine the affective and psychological meaning assigned to each stimulus. The content analysis revealed several reasons for the difficulty in factor structure interpretation.

First, a wide range of semantic levels was indeed present within the response distribution for each stimulus (see Appendix A for pooled response distributions for all stimuli), and it was apparently possible for the responses given to one stimulus-member of a particular factor to be the key for the entire factor. That is, all other stimuli within the factor may share responses primarily with the key stimulus word (sentence-stem) and not necessarily share many responses among themselves. For example, examination of the response distributions for Primary Factor 7 stimuli, shown in Table 3, indicated that the stimulus word "Schedule" was apparently a key to the factor. Most of the responses given to "Schedule" were shared with the other three stimulus words. However, a number of semantic levels of response within the response distributions given to the other three stimulus words were not shared. The non-sharing of semantic levels did not influence the factor structure and therefore could not be used to facilitate the psychological interpretation of any factor as a dimension of the work environment.

Second, the RC statistic was not sensitive to contextual shifts in meaning. For example, Table 3 indicates that the word "time" was used in one sense in response to "Schedule" and in another sense in response to "Freedom." Yet these different levels of usage were considered equivalent when the RC was computed for the two stimulus words. This phenomenon further underscores the difficulty in assigning a satisfactory psychological meaning to the factor.

Third, the data suggested that if the responses "work" and "job"—given to over 50% of all stimuli and considered artifacts of the work-related set—were removed, a different factor structure could have emerged. This is likely since a factor structure is a function of the RC matrix and each entry in the matrix is an index of the number and rank order of associative responses shared between two stimuli. With over 50% of all stimuli sharing the responses "work" or "job," the factor structure was indeed confounded.

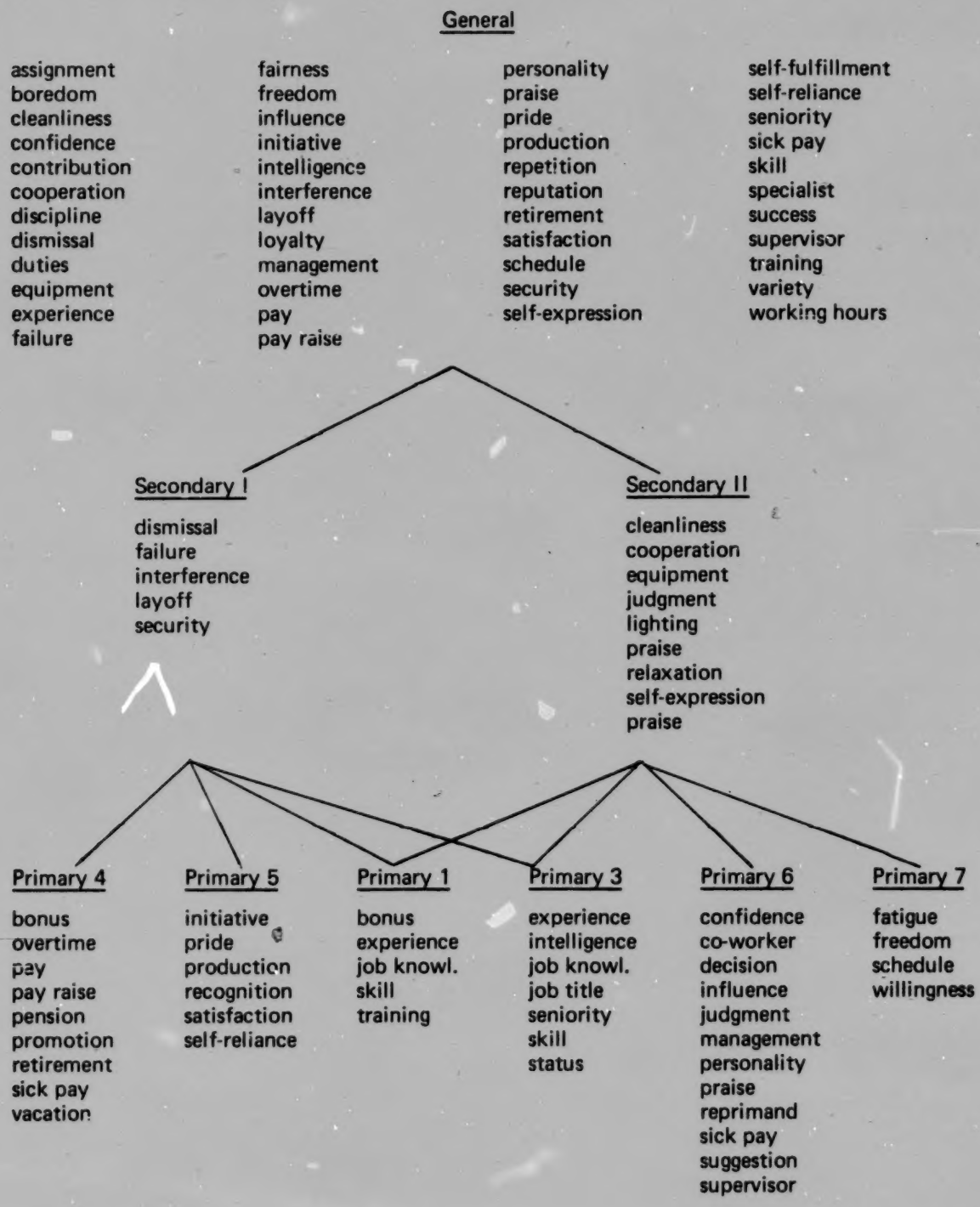

Figure 2. Hierarchical Factors with Variables Loading .2956 or Above.

Table 3

Response Distributions for Primary Factor 7 Stimulus Words

Schedule	f	Freedom	f	Fatigue	f	Willingness	f
time[a]	13	necessary[a]	3	work[a]	10	work[a]	5
work[a]	4	work[a]	3	rest	5	helpful[a]	4
list	3	good	3	boring	3	learn	2
routine	2	time[a]	3	tiredness	3	do	2
performance[a]	2	great	2	sleep	2	helping	2
rigid	2	fun	2	busy	2	able	2
daily	2	procedure	2	performance[a]	2	use	2
job[a]	2	need	2	run down	2	perform	2
timely	2			job[a]	2	agreeable	2
necessary[a]	2			task	2	help	2
helpful[a]	2				2	job[a]	2

[a] Response words shared by two or more stimulus words.

Fourth, the difficulty in factor interpretation was further confounded by the functional ambiguity of some stimulus words (sentence-stems). The ambiguity of these stimuli also prevented content analyses from determining clearly what affective and psychological meaning workers associated with the work environment. Some stimuli were given various interpretations which indicated that they were being perceived in various contexts. These stimuli were not perceived by workers as representing only the appropriate work-related category from which they were selected. For example, examination of the response distribution for the stimulus word "influence," shown in Table 4, indicated that it was viewed from a conceptual framework broader than the work environment: as political influence, the result of friendship, and a function of knowledge and ability. Thus, it was not clear that affective responses (e.g., "good" and "bad") were indications of the individuals' attitudes toward their influence at work, nor was it clear to what extent subjects were responding to "influence" in a work-related context.

Table 4

Response Distribution for
Stimulus Word "Influence"

Influence	f
friend	3
helpful	3
good	2
supervisor	2
help	2
bad	2
co-worker	2
knowledge	2
job	2
ability	2
performance	2

Therefore, the perceived ambiguity of some stimulus words further complicated interpretation of the factor structure. Because of this ambiguity, some stimulus words failed to elicit work-related responses specific to the category of work that the stimulus word was intended to represent. This made difficult the interpretation of some affective responses as indicators of subjects' attitudes toward a specific aspect of their work environments.

Summary

Using the word association paradigm, an attempt was made to determine the hierarchical structure of work environment categories and to determine the psychological meaning, especially the affective meaning, of each of those categories. The investigation did not produce a meaningful

associative map of the work environment. Several reasons have been advanced as possible contributions to this result.

First, the results suggested that the calculation of a stimulus-by-stimulus RC matrix, and subsequent factor analytic reduction, may be inappropriate for word association data where multiple semantic levels of responses are expected, unless a method is also available for determining the psychological equivalence of and differences between response distributions prior to computation of the overlap between the distributions. Second, given that there were multiple semantic levels within response distributions and that the meaning of identical responses may have shifted in the context of different stimulus words, the RC measure of relatedness was not an adequate index of these complex semantic relationships between stimuli. Third, although the stimuli elicited a wide range of semnatic responses, a condition necessary to determine the full psychological meaning of the stimuli, the responses "work" and "job" were interpreted as artifactual. Finally, subjects placed the stimuli in multiple contexts. Apparently, many stimuli lacked the specificity to elicit responses relevant to the particular aspect of the work environment each was intended to represent. This made interpretation of a response distribution as representing the meaning of a particular aspect of the work environment highly tenuous. The stimuli may have lacked specificity in another sense. It was possible that, even in those instances when a content analysis suggested the subjects had responded within the context of the work environment, they may not have responded from a personal viewpoint, indicating what <u>their</u> work environment <u>meant</u> to <u>them</u>.

CHAPTER IV

STIMULUS PHRASE LIST DEVELOPMENT

The single-word or sentence-stem form of stimuli for the continued word association method used in Experiment I was inadequate to investigate the affective and other psychological meanings of the work environment. It was concluded that, if continued word association was to be a viable method to determine the meaning of the work environment for the worker, a different stimulus format would have to be used.

Such a format must increase the specificity of the stimuli so that responses given by workers would be confined to the work environment context. However, increased specificity should not be obtained at the expense of reduced semantic levels of response within that context, especially the affective level. A viable format would also ensure that stimuli elicit self-referent responses from the worker in the context of his present work environment. Moreover, it should decrease the probability that artifactual responses, such as "work" and "job," would be elicited from subjects.

A review of the literature suggested the transformation of stimuli from single words to phrases. Specifically, in a recent study concerning the measurement of the construct "morale," Scott (1967) used semantic differential scales to measure the following work-related phrases:

My Opportunities for Growth
My Job
My Supervisor
Top Management
Company Benefits
My Fellow Workers
My Pay
My Working Conditions

There were several reaons why this particular phrase format appeared to meet the necessary criteria for a viable stimulus form in further, continued word association investigations of meaning. Artifactual responses, such as "work" and "job," should be incongruous with this phrase form. Also, this form of stimulus should primarily elicit self-referent responses which would emphasize the personal affective meaning of the stimuli. Finally, worker's associations should be relevant only to the work environment and should still contain multiple semantic levels of meaning.

In support of this latter assertion, Rouse and Verinis (1965) demonstrated that compound stimuli, when selected to define and provide high transitional probability for producing a desired response, would increase the probability of that response. It seemed plausible that work-related phrases would define and provide high transitional probability for producing responses relevant to

only the work environment. In addition, responses that are confined to the stimulus-phrase context should still contain multiple semantic levels (i.e., the number of semantic levels should not be substantially reduced). Indeed, Cramer (1968) reported that, in general, a more heterogenous set of responses were given to compound multiple-word stimuli than to single-word stimuli (pp. 91-98). This suggested that phrases may increase the semantic range of responses.

In brief, this format should delimit the subject's associative response domain to that aspect of his job defined by each stimulus phrase. The narrowed response domain should contain various semantic levels of response, including those representing affective meaning. The concept phrase format suggested by Scott was therefore adopted for use in further research, and single-word stimuli were transformed to phrases.

The total stimulus word list was examined by category. Within each category, single words intended to represent important aspects of the work environment were transformed to the concept phrase representative of that aspect. For example, the single word "influence" was translated into the two phrases "my control over work pace" and "my control over work methods." The words used in Experiment I were given preference, since they had previously been selected as representative of the work categories. Table 5 lists the resulting 40 concept phrases developed to be representative of the several categories of work.

The use of concept phrases reduced both the original number of work categories and the number of stimuli used to represent the work environment. For example, the investigators felt that the phrases "opportunities for on-the-job training," "use of my abilities at work," and "my competence at work" served as well as the six single word stimuli to effectively represent an associative domain concerned with both the subcategory Success and Failure in Performance of Job & the subcategory Skills and Abilities of Worker. Hence, the number of stimuli used to represent the combination of these two subcategories was reduced from six single words to three phrases, and since these phrases appeared to represent both subcategories, the Skills and Abilities of Worker subcategory was dropped as a discrete category label. In a similar manner the subcategories Job Level or Occupational Status and Task Components of the Job were represented by stimulus phrases in combination with other subcategories and the labels were deleted. The total number of stimuli representative of the work environment was reduced from 100 stimulus words to 40 stimulus phrases. The categories Attributes of Worker and Adjectives were not represented by stimulus phrases. The phrase form of a stimulus word contained within these categories would still have been a descriptive one, and the results of Experiment I suggested that such descriptive stimuli would elicit responses representing only a narrow range of the psychological meaning of the work environment (i.e., the range of interpretable meaning would be limited to the affective dimension and would not include those related and important cognitively based responses).[5]

Summary

A phrase form of stimuli was developed to replace the single-word form. Experiment I indicated that word association methods, using single-word and sentence-stem form of stimuli, was

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[5]See Appendix A for the responses elicited by adjective stimuli in Experiment I.

Table 5

Stimulus Phrases for Work Categories

Job Content	General Need Satisfaction	Compensation	Working Conditions	Supervision	Company and Union	Coworkers
Assignment and perceived complexity of tasks	Security	My pay	My working conditions	My supervisor	Company policies on my job	My fellow co-workers
My opportunities to do a variety of tasks	My job security	My opportunities for promotion	The work methods used on my job	My supervisor's ability to handle people	Handling of grievances on my job	
Opportunities to do challenging work	Social	My fringe benefits	The work pace used on my job	Interaction with my supervisor	The union on my job	
My job	Interaction with my coworkers		My working hours	Supervisor's evaluation of my work		
Control of work methods and work pace	Opportunities to help others in the community		The equipment used on my job			
My control over work methods	Me at work		Overtime work			
My control over work pace	Esteem		Coffeebreaks			
Interference with my job	Moral "rightness" of my job					
Skills and abilities of worker	Recognition for my work					
Use of my abilities at work	My prestige at work					
My competence at work	Prestige of my job in the community					
Opportunities for on-the-job training	Autonomy					
	Freedom to use my own judgement at work					
	My self-confidence at work					
	Self-actualization					
	Opportunities for self-fulfillment					
	Feeling of accomplishment at work					
	Daydreaming at work					

inadequate to investigate the non-technical, psychological meaning of the work environment. A format suggested by Scott (1967) appeared to resolve the major difficulties. The suggested format involed transforming stimulus words into stimulus phrases. This resulted in both fewer work-related categories and fewer stimuli to represent those categories. Descriptive words were not transformed into phrases since Experiment I results suggested that descriptive phrases were inefficient stimuli.

CHAPTER V

EXPERIMENT II

The results of Experiment I were generally supportive of a number of features of the word association method to investigate the non-technical, psychological meaning of work-related stimuli. But, results also suggested that the Experiment I methodology needed to be changed in two ways for further investigations to be successful in defining the affective and descriptive meaning of the work environment.

First, emphasis should be shifted from a dimensional analysis of the stimuli to a dimensional analysis of the response words. Experiment I indicated that the dimensional analysis of word association stimuli was confounded by the inability of the overlap measure to account for the psychological equivalences and differences between response distributions. Further, the RC measure of relatedness did not include all of the semantic information contained within the response distributions. Therefore, the hierarchical factor analysis of the RC matrix could not be interpreted clearly; the analysis lacked face validity and could not be used as a context for interpreting the responses given to a particular factor member. The results suggested that stimulus meaning should be derived from the associative responses themselves (i.e., from a content analysis of response distributions).

Second, the stimulus form should be changed in order to delimit associative responses to those relevant to a subject's present job and exclude irrelevant artifactual responses like "work" and "job," without constricting associative responses of an affective nature. It was felt that such focusing of the subjects' associative response domain could facilitate content analysis and could be accomplished by transforming single-word stimuli to phrase-form stimuli.

Use of Response Word Categories

The results of Experiment I also suggested that the same response word can have different psychological meanings in the context of different stimuli. In Table 3, for example, the response "performance" was given to both the stimulus word "schedule" and the stimulus word "fatigue." In the former context "performance" is used as a modifier to indicate a work routine or task sequence while in the latter context "performance" labels a causative factor in fatigue. Therefore, it would be helpful to determine the psychological meaning of responses within the context of the eliciting stimulus phrases. This would account for any shift in meaning an associative response might have when considered in the context of different stimulus phrases, as in the example listed above, and would reflect more accurately the associative meaning of each phrase. One method of accounting for shifts in meaning across contexts would be to establish a set of common associative response categories that would classify all the associative responses given to all the stimulus phrases. Then, the associative responses given to each stimulus phrase would be categorized independently of responses given to

other stimulus phrases. That is, the meaning of each response would be considered in the context of its eliciting stimulus phrase, and only its eliciting stimulus phrase, thereby assuring that the response would be assigned to the most meaningful category.

The use of associative response categories would clearly facilitate content analysis and also would suggest an associative structure of meaning for the work environment, as follows: since any contextual meaning-shift of each associative response is accounted for, a clear content and pattern of meaning for each stimulus phrase could be derived by examining the distribution of responses across all of the associative response categories. Any differential or disproportionate category usage would reveal those aspects of each stimulus that subjects have emphasized, making it easier to further determine the exact meaning of each stimulus phrase. Hence, associative response categories would facilitate content analyses. At the same time, the associative response distribution pattern, or differential usage of associative response categories within each stimulus phrase, would allow comparisons between and among stimulus phrases to reveal similarities and differences in the patterns of meaning. Since each stimulus phrase conceptualizes one facet of the work environment, similarities and differences in meaning among or between stimulus phrases would illustrate the relationship between aspects of the work environment, a relationship that would reflect an associative structure of the work environment.

However, the use of response word categories must clarify, not distort, the meaning characteristic of the distribution of responses given to each stimulus phrase. Response word categories must be flexible enough to accurately reflect the semantic sense or part of speech that each response word represents. A review of response-word category usage in word association suggested that it was possible to establish categories that would not distort the responses and would be an aid in content analysis (e.g., Kreitler & Kreitler, 1968; Laffal & Feldman, 1962).

One particular method suggested by the review seemed most appropriate to the present investigation. Kreitler and Kreitler (1968) reported a method to determine response categories that were a function of the responses themselves. Kreitler and Kreitler asked judges to independently label statements given in response to stimulus words. The label represented that aspect of the stimulus or its reference conveyed by the statement. After semantic differences were resolved in discussion and the labels with common denominators were grouped together, the unanimity in labeling among independent judges was complete in 99% of the cases. Thirteen distinct labels enabled the grouping of 97.2% of the statements into clearly defined groups or categories.

A preliminary test of this approach, using the data from Experiment I, indicated that the Kreitler and Kreitler method could be used to determine those semantic categories of responses that were actually represented by the response words themselves. Further, when a sample of categorized response distributions were subsequently content analyzed, the psychological meaning usually could be determined. There were some difficulties in interpreting certain response distributions. These difficulties, however, were attributed to anomalies within the Experiment I data (e.g., the presence of the responses "work" and "job").

This preliminary test of the Kreitler and Kreitler method also suggested that the use of response categories could facilitate comparisons between occupational groups. To ensure the appropriateness of response categories to all occupational groups sampled, the categories were developed from the pool of responses compiled from all subjects, across all occupations.

Research Questions

This investigation was concerned primarily with the following research questions:

1. For subjects in a range of occupations, can work-related stimulus phrases elicit responses containing multiple semantic levels, all relevant to the subjects' personal work environments?

2. Will phrase-form stimuli, along with appropriate instructions to subjects, activate a work-related affective response domain?

3. Will subjects' pooled responses be useful to establish response categories common to all stimulus phrases and all occupations, categories that will both accurately classify responses and aid in determining the psychological meaning of each stimulus phrase?

4. Will an examination of the categorical distribution of responses within each occupation facilitate the inter-occupational comparisons and aid in determining the psychological meaning of each stimulus phrase within occupations?

Method

Subjects

Subjects were 19 automotive mechanics (all males), 19 secretaries (all females), and 19 computer data processors (14 males) employed in the metropolitan area of Columbus, Ohio. Ages ranged from less than 21 to more than 46 years within each occupation.[6] The modal age range for all subjects was 31-35 years. All subjects had been employed for one or more years within their occupation, averaging 11.3 years, 6.6 years, and 7.4 years on-the-job experience for automotive mechanics, secretaries, and computer data processors, respectively. Data were collected at 15 different employment locations in sample sizes ranging from one to seven subjects.

Instrumentation

The 40 stimulus phrases listed in Table 5 (see page 31) were prepared in a continued-association format. That is, each phrase was printed in a column 15 times on a single sheet of 8½" x 11" paper, each repetition followed by a blank line, as follows:

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[6] It is not possible to report the exact age of any subject. Subjects were asked to check one of several blocks, each representing an age range of five years. However, the lowest age range block was labeled "under 21," and the highest was labeled "over 46."

job knowledge _____

job knowledge _____

job knowledge _____

job knowledge _____

etc.

Fifty-seven booklets of 40 pages each were then collated in six different random orders. In addition, each booklet contained a background information sheet appropriate to one of the occupational groups in the sample, a completed example of the word association task, and key portions of the instructions read to the subjects.[7] Each set of 19 booklets appropriate to an occupation contained at least three different random orders of the 40 stimulus phrases.

Procedure

Data collection. Subjects were told that the stimulus phrases were constructed to find out what work means to people and what people think and feel about their work. Subjects were instructed to write responses that best expressed what each stimulus phrase meant to them in relation to their work situations. The experimenter asked all subjects to note that the completed stimulus phrase examples on the second page of each booklet contained many different single-word responses and that all example responses were appropriate. Subjects were asked to give single-word responses but were allowed to give multiple-word responses if they could not think of single-word responses. Finally, instructions were given to write as many responses as the stimulus phrases made them think of within the time allowed for each phrase. A 500 Hz, pre-recorded tone sounded on a tape recorder at 50 second intervals to signal the subjects to stop writing, turn the page, and begin writing responses to the next stimulus phrase. Each subject completed the task in a single test session. Following completion of the task, subjects were given additional information about the purpose of the experiment, and the experimenter answered subsequent questions.

Category development. The responses from all 57 subjects were pooled for each of the 40 stimulus phrases. However, a response was pooled only if it was given to a stimulus phrase by at least two subjects. These data were used to develop response word categories and are listed in their entirety in Appendix B.

Response categories were developed using a two-stage method suggested by Kreitler and Kreitler (1968). First, three judges, all educational researchers, were asked to independently examine the pooled response distribution for each stimulus phrase. Then, within the context of a stimulus phrase, judges were asked to determine which aspect of the stimulus phrase or its reference was conveyed by

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[7] See Appendix B for stimulus phrase format data collection instrument.

each response word. Next, those response words that conveyed a common aspect were grouped together and assigned a label or a response category heading. For example, the responses "boring" and "exciting," given by computer data processors in response to the stimulus phrase "my job," were judged to convey a common aspect of the job, an aspect that judges subsequently assigned the label Action. This process was repeated for each stimulus phrase response distribution.

In the second stage of the categorization, judges worked together and were required to reach 100% agreement on each step. First, judges were required to reach agreement upon the groupings of responses within each response distribution and the labels assigned to each group. Next, judges were required to agree upon the minimum set of labels or categories which could subsume all responses given to all stimulus phrases.

After semantic differences were resolved in discussion and the labels with common denominators were grouped together, there remained 13 categories of associative responses. Judges were then required, as a group, to derive a definition for each of the response categories.

Data analysis. Following the development of response categories, several analyses were performed. First, a content analysis was made on the pooled, categorized, response distributions given by all 57 subjects to a sample of seven stimulus phrases. Each stimulus phrase was considered a key representative of one of the seven different work-related categories.

Second, all responses given by the 19 subjects within each occupation were pooled for each of the 40 stimulus phrases. These response distributions are reported in Appendix B. These data separated the previously categorized, pooled associative response distributions into three occupational distributions, across the 13 common response categories. The three occupational distributions were then content analyzed and compared for inter- and intra- occupational similarities and differences in meaning.

Results and Discussion

Categories and Meaning

Response category development. The 13 conceptually distinct response categories derived by the judges are presented below, showing their percent of use. The percent of use represents the proportion of response words included in a particular category to the total number of response words (as listed in Appendix B). The categories, ranked by percent of use, were as follows:

1. Description or evaluation of the referent (52.10%) Responses included in this category indicated both relatively enduring descriptive qualities (e.g., me at work—responsible) and pure evaluation of the referent in terms of positive-negative polarity (e.g., my supervisor—good). It did not include responses that constituted the abstract or physical material of which the referent consisted. Not included were responses that indicated both evaluation and one of the following aspects of the referent: action, frequency, quantity, or potency (e.g., my opportunities to do a variety of tasks—too many; opportunities for on-the-job training—not enough). These responses were included in the Action, Frequency, Quantity, and Potency categories described below.

2. Referent's saliency (10.23%) Responses included such terms as importance, necessity, and need (e.g., use of my abilities at work—necessary).

3. What the referent consists of or includes (7.46%) Responses included references to the abstract or physical material of which the referent consisted (e.g., opportunities to help others in the community—service), or to the items or parts which made up the referent (e.g., equipment used on my job—tools). The latter illustrates identification of the referent as a superordinate concept or structure.

4. Referent's quantity or amount (7.05%) The following illustrates the responses included in this category: my working hours—eight.

5. Referent's action(s) or potential for action(s) (5.76%) Responses included indication of the referent's level or potential level of activity (e.g., me at work—busy or efficient); the novelty inherent to the referent (e.g., my opportunities for on-the-job training—variety); and indication of the referent as an invigorating, activating, or potentially activating force (e.g., my working conditions—relaxing or tense; my job—dull or exciting).

6. Causes for the referent's occurrence/non-occurrence (5.49%) This category included responses describing the conditions for the referent's occurrence/non-occurrence or existence/non-existence (e.g., daydreaming at work—boredom or no-time).

7. Referent's frequency of occurrence (5.34%) The following illustrates the responses included in this category: my overtime work—infrequent.

8. Referent's potency (1.89%) Responses indicated power and the things associated with power such as size, weight, and toughness (e.g., my prestige in the community—high; my supervisor's ability to handle people—strong).

9. Consequences which result from the referent's existence or from one of its activities (1.60%) Included were responses which did not imply the prime function, purpose, or role of the referent (e.g., my accomplishments at work—confidence).

10. Referent's function, purpose, or role in the context of the worker (1.21%) Included were responses describing the uses to which the referent may be put and is usually put (e.g., my pay—security; work methods—accuracy).

11. Referent's manner of occurrence (0.98%) Included responses describing a series of acts, activities, or operations characteristic of the referent as a dynamic process (e.g., my self-confidence at work—learning or training).

12. Referent's similarity or contrast to other referents (0.61%) The following illustrates the responses included in this category: my job—work.

13. Referent's contextual allocation (0.15%) Included responses to the abstract or physical structure to which the referent belonged or of which the referent formed a part.

The above response categories included 99.87 percent of the pooled responses reported in Appendix B. The remaining 0.13 percent were considered inappropriate responses to the stimulus phrase (e.g., the subjects appeared to have responded to another referent) and were not included among the response categories.

These 13 categories replicated 10 of the 13 categories of lexical meaning reported by Kreitler and Kreitler (1968) and included the three additional categories of Saliency, Potency, and Frequency. The mean number of categories per stimulus phrase was 4.97 categories (SD=1.35), as compared to 2.80 categories (SD=1.34) per stimulus word reported by Kreitler and Kreitler. This outcome was somewhat surprising since Kreitler and Kreitler's subjects were allowed to free associate to single words and to respond with sentences, a much richer form of communication. It had been expected that the present investigation would reveal substantially fewer categories, given the phrase form of the stimuli and instructions to try to limit responses to single words. However, the number of categories developed here suggested that single word responses can reveal one or more lexical or semantic aspects of the stimuli as well as sentence-form responses. Both studies, Kreitler and Kreitler (1968) and the present one, clearly supported the use of word association techniques to investigate the broad meaning of stimuli.

The work-related stimulus phrases, as expected, elicited multiple-semantic levels of responses representing various aspects of the work-related stimulus phrase. This was interpreted as a partial answer to the first of the four research questions posed for the study. Pooled responses were useful for establishing general semantic categories, and this was considered an affirmative response to the third research question.

The Description/Evaluation category was sufficient to include 52.10% of all responses, approximately five times as many as were included in the next largest category. Additional value-laden responses were included in the remaining 12 categories, which supported the expectation that the response distributions would emphasize the affective meaning of the work environment (research question two). Given that the instructions used in Experiment II were little different from those used in Experiment I, the phrase form of the stimuli was considered the major factor in establishing an affective response set.

The phrase form of the stimuli and the instructions that encouraged single-word responses appeared to be major reasons for the under-representation of responses within the Contextual Allocation (0.15%), Similarity/Contrast (0.61%), and Manner of Occurrence (0.98%) categories. The stimulus phrases provided a work-related context and encouraged descriptive rather than comparative responses. Also, use of the single-word response set made it difficult to characterize the referent as a dynamic process.

Content and structure of meaning. In order to determine the extent to which associative responses revealed detailed affective and descriptive meaning, the pooled and categorized response distributions for seven selected stimulus phrases were content analyzed. The distributions are reported in Table 6. The seven stimulus phrases were selected to represent each of the seven general categories of work described earlier (see Table 5). A brief discussion of the content analysis follows.

The categorical distribution of responses among the seven selected stimulus phrases allowed comment on particular aspects of the stimulus phrases. The response categories themselves turned

out to be general modes of classification of phenomena, categories which appeared similar to what have been termed "attributes" or "dimensions" in studies of concept formation (Kreitler & Kreitler, 1968).

The content and structure of meaning was inferred from the pattern of responses within and among response categories. Thus, the meaning of a stimulus phrase was inferred from an examination of the responses contained within each of the response categories. For example, a part of the meaning of the stimulus phrase "my job" was inferred from an examination of responses within the response category Function. In general, as shown in Table 6, the sample of 57 subjects apparently viewed their job as a source of security and friends and, most of all, as a source of money.

Additional meaning and a structure of meaning for stimulus phrases was inferred from the comparison of responses across response categories. For example, when responses within the Description/Evaluation response category and within the Action response category were compared for the stimulus phrases "my job" and "me at work," they suggested that the workers generally had characterized their job as rewarding and interesting and themselves as happy and busy. A few workers, however, described their jobs as dirty and boring and themselves as dissatisfied at work and as performing routine actions.

Thus, in response to the third research question posed for this investigation, response categories were useful in helping to identify the meanings workers associated with stimulus phrases. The responses within each of the associative response categories were examined to infer one aspect of meaning, while the responses among the several categories were examined to infer a structure of meaning.

These analyses of the categorized responses to all stimulus phrases revealed that artifactual responses were not present in the Experiment II data. The words "work" and "job," ubiquitous in Experiment I, were virtually non-existent within these pooled response distributions, and there was no evidence of other systematic, artifactual responses. Absence of artifactual responses was interpreted as further affirmation of the first research question posed for Experiment II. Further, responses were found to be relevant to the subjects' personal environment. Responses in Table 6 indicated clearly that the subjects' responses were specific to the work-related domain outlined by the stimulus phrase and represented personal viewpoints. The content analyses described briefly above indicated that response categories could be derived from pooled response data and could facilitate the identification of meaning.

Occupational Comparisons

Response distributions for each of the three sample occupations are reported in Appendices B-3, B-4, and B-5 and are categorized in Tables 7 through 12. Appendices B-3, B-4, and B-5 report all of the responses given within each occupation, by stimulus phrase and frequency of response. Tables 7 through 12 report only those occupation-specific responses given to each stimulus phrase by at least two subjects in the occupation. Thus, these tables do not contain all of the responses previously reported in the response distributions pooled across occupations and categorized in Table 6. A response was included in the pooled distribution and reported in Table 6 if it was given to a stimulus phrase by two or more of the 57 subjects regardless of which occupation they represented.

The response distributions reported in Tables 7 through 12 were content analyzed to determine the specific occupational meaning of the stimulus phrases. As an aid in these content analyses, the

Table 6

Pooled Response Distributions for Seven Selected Stimulus Phrases: By Work Category and Frequency of Response

Work Category / Selected Stimulus Phrases / Response Categories	Job Content: my job	General Need Satisfaction: me at work	Compensation: my pay	Working Conditions: my working conditions
1. Description/Evaluation: positive	good 7, fun 6, rewarding 6, satisfying 3, helpful 3, enjoyable 3, adequate 2, good pay 2, fulfilling 2, future 2, secure 2, like it 2, pleasant 2, I like it 2	happy 8, helpful 7, friendly 6, good 3, content 2, enjoyable 2, fair 2, concerned 2, experienced 2, knowledgeable 2, responsible 2, steady 2, honest 2, clean 2, neat 2, normal 2, reliable 2	good 14, fair 9, adequate 7, average 4, better 3, is good 2, sufficient 2, ample 2, satisfied 2	good 16, fair 7, clean 6, pleasant 5, enjoyable 5, excellent 4, improving 3, comfortable 2, friendly 2, ok 2, warm 2
negative	dirty 2, bad 2	dissatisfied 2, moody 2, tired 2	could be better 5, low 2	could be better 4, dirty 3, crowded 3, poor 2, bad 2
2. Saliency	necessary 5, important 2		necessary 2	important 5, necessary 2
3. Action	boring 5, interesting 5, exciting 4, challenging 3, demanding 2, dull 2	busy 10, efficient 6, interested 4, bored 4, fast 4, routine 2, production 2, useful 2	varies 2	pressures 2, relaxed 2, unpressured 2
4. Potency				
5. Function	money 7, pay 2, security 2, friends 2		security 2	
6. Consequences		learning 2		morale 2
7. Consists of/Includes	knowledge 5, typing 4, training 3, mechanic 2, skill 2, experience 2, ability 2, accuracy 2			light 2, space 2
8. Contextual Allocation				
9. Similarity/Contrast	work 3			
10. Frequency				
11. Quantity			not enough 5, inadequate 4	
12. Cause for (Non)Occurrence				
13. Manner of Occurrence				

Table 6 (cont'd)

Work Category / Selected Stimulus Phrases / Response Categories	Supervision: my supervisor	Company and Union: me at work	Coworkers: my fellow coworkers
1. Description/Evaluation: positive	friendly 12, helpful 11, fair 8, good 6, intelligent 5, ok 5, considerate 5, kind 4, experienced 4, nice 4, knowledgeable 4, understanding 3, easy going 3, great 3, thoughtful 2, neat 2, responsive 2, smart 2, dependable 2	good 9, fair 8, ok 4, reasonable 2, lenient 2, agreeable 2, fine 2, helpful 2	helpful 17, friendly 15, good 10, nice 5, knowledgeable 5, cooperative 4, understanding 4, accurate 3, ok 3, enjoyable 3, considerate 3, kind 3, competent 2, experienced 2, normal 2, fair 2, likeable 2, fun 2, great 2, young 2
negative		unfair 3, strict 2	unconcerned 3, lazy 2
2. Saliency		necessary 4, important 2	
3. Action	efficient 3	flexible 3, changeable 2	varied 2
4. Potency			
5. Function			
6. Consequences			
7. Consists of/Includes		on time 2, clean 2	
8. Contextual Allocation			
9. Similarity/Contrast	friend 4, boss 3		friends 6
10. Frequency			
11. Quantity			
12. Cause for (Non) Occurrence		not enforced 2	
13. Manner of Occurrence			

Table 7

Responses to Work-Related Phrases Representing Job Content: By Occupation, Category, and Frequency

Response Categories	my job						my opportunities to do a variety of tasks						my opportunities to do challenging work					
	Data Processors	f	Secretaries	f	Automotive Mechanics	f	Data Processors	f	Secretaries	f	Automotive Mechanics	f	Data Processors	f	Secretaries	f	Automotive Mechanics	f
1. Description/Evaluation: positive	fun	2	rewarding	3	good	4	good	4	good	3	good	6			good	3	good	5
	satisfying	2	good	2	like it	2	excellent	3	desired	2	helpful	5					great	4
	adequate	2	fun	2	rewarding	2			challenging	2	excellent	2						
	helpful	2	enjoyable	2	fun	2					rewarding	2						
negative					dirty	2												
2. Saliency			necessary	3					important	2	necessary	3	important	2	necessary	2		
			important	2					necessary	2					important	2		
3. Action	boring	2	interesting	4			boring	2	interesting	4			varied	2				
	exciting	2	boring	3														
			dull	2														
			exciting	2														
			challenging	2														
4. Potency																		
5. Function					money	6												
6. Consequences	future	2			friends	2												
7. Consists of/Includes	accuracy	2	typing	4	knowledge	2												
	training	2	knowledge	2														
8. Contextual Allocation					work	2												
9. Similarity/Contrast					mechanic	2												
10. Frequency									daily	2			frequent	2	infrequent	3	always	2
11. Quantity							limited	2	limited	2	none	3	limited	2	many	2		
							many	2	unlimited	2					limited	2		
									constantly	2								
12. Cause for (Non)Occurrence							knowledge	2			experience	2						
13. Manner of Occurrence																		

Table 7 (cont'd)

Response Categories	work methods used on my job						work pace used on my job						my control over work methods					
	Data Processors	f	Secretaries	f	Automotive Mechanics	f	Data Processors	f	Secretaries	f	Automotive Mechanics	f	Data Processors	f	Secretaries	f	Automotive Mechanics	f
1. Description/Evaluation: positive	good	2	friendly good	3 2	clean	2							fair	2	good	2	helpful yes good	4 2 2
negative																		
2. Saliency															important necessary	2 2	necessary	2
3. Action			efficient	5			fast varies quick steady pressure hectic speed	4 3 2 2 2 2 2	slow fast steady moderate varied hectic rushed	5 4 3 3 2 2 2	fast	3						
4. Potency																	none	4
5. Function	organization	2	improvement	2													safety	2
6. Consequences																		
7. Consists of/Includes			neatness	2	air tools	2 2												
8. Contextual Allocation																		
9. Similarity/Contrast																		
10. Frequency																		
11. Quantity																	none	4
12. Cause for (Non)Occurrence	supervision	2			knowledge	2												
13. Manner of Occurrence					speed	2												

Table 7 (cont'd)

Response Categories	my control over work pace						interference with my job						use of my abilities at work					
	Data Processors	f	Secretaries	f	Automotive Mechanics	f	Data Processors	f	Secretaries	f	Automotive Mechanics	f	Data Processors	f	Secretaries	f	Automotive Mechanics	f
1. Description/Evaluation: positive	good	2	good efficient	2 2	good	3							good	2	helpful rewarding	4 2	good helpful yes	3 2 2
negative																		
2. Saliency	necessary	3	necessary	2	necessary	3							necessary	2				
3. Action	flexible	2																
4. Potency	complete	2	none	2	none	4									limited	3		
5. Function																		
6. Consequences																	learning	2
7. Consists of/Includes			speed	2	speed	2	personal problems	2	noise phones	2 2								
8. Contextual Allocation																		
9. Similarity/Contrast																		
10. Frequency																	always	2
11. Quantity							none minimum	2 2	none	2	none average	4 2					all total	3 2
12. Cause for (Non)Occurrence			deadlines	2									accuracy responsi-bility	2 2	try	2		
13. Manner of Occurrence					slow	2							speed	2				

Table 7 (cont'd)

Response Categories	my competence at work						opportunities for on-the-job training					
	Data Processors	f	Secretaries	f	Automotive Mechanics	f	Data Processors	f	Secretaries	f	Automotive Mechanics	f
1. Description/Evaluation:												
positive	good	2	good	12	good	7	very good	2	helpful	4	good	7
	excellent	2	satisfying	2	fair	2	excellent	2	good	3	helpful	3
											ok	2
negative												
2. Saliency					necessary	3			necessary	5	necessary	3
									needed	3	needed	2
3. Action					fast	2	variety	2				
4. Potency	adequate	3			none	2						
	increasing	2										
	high	2										
5. Function											knowledge	2
6. Consequences	confidence	2										
7. Consists of/Includes												
8. Contextual Allocation												
9. Similarity/Contrast												
10. Frequency											everyday	2
11. Quantity	increasing	2					many	2	none	2	not enough	2
	adequate	3							many	2		
12. Cause for (Non)Occurrence	experience	3										
13. Manner of Occurrence												

Table 8

Responses to Work-Related Phrases Representing General Need Satisfaction: By Occupation, Category, and Frequency

Response Categories	me at work						my job security						my fellow workers					
	Data Processors	f	Secretaries	f	Automotive Mechanics	f	Data Processors	f	Secretaries	f	Automotive Mechanics	f	Data Processors	f	Secretaries	f	Automotive Mechanics	f
1. Description/Evaluation: positive	happy	3	happy	4	good	3	good	5	good	4	good	4	friendly	5	helpful	6	helpful	7
	friendly	2	helpful	4	clean	3	excellent	2			fair	3	helpful	4	friendly	6	good	4
	helpful	2	friendly	3	fair	2							ok	3	good	4	friendly	4
			enjoyable	2	honest	2							knowledgeable	3	cooperative	3	nice	3
			concerned	2	neat	2							accurate	2	nice	2	kind	2
													good	2	likeable	2		
													intelligent	2	understanding	2		
													enjoyable	2	considerate	2		
													understanding	2	great	2		
													considerate	2	knowledgeable	2		
negative			dissatisfied	2							insecure	2			lazy	2		
			moody	2											unconcerned	2		
2. Saliency							important	5	necessary	5	necessary	2						
									important	3								
3. Action	efficient	3	busy	5	busy	3												
	busy	2	bored	4	fast	3												
			interested	3														
			efficient	2														
4. Potency											none	3						
5. Function																		
6. Consequences	learning	2																
7. Consists of/Includes																	friends	4
8. Contextual Allocation																		
9. Similarity/Contrast																		
10. Frequency																		
11. Quantity																		
12. Cause for (Non)Occurrence																		
13. Manner of Occurrence																		

Table 8 (cont'd)

Response Categories	interaction with my coworkers						opportunities to help others in the community						moral "rightness" of my job					
	Data Processors	f	Secretaries	f	Automotive Mechanics	f	Data Processors	f	Secretaries	f	Automotive Mechanics	f	Data Processors	f	Secretaries	f	Automotive Mechanics	f
1. Description/Evaluation: positive	good	3	friendly	8	good	6			rewarding	2	good	2	good	2	good	4	fair	4
	helpful	2	good	7	friendly	4			helpful	2	helpful	2	honest	2	helpful	2	good	3
	enjoyable	2	helpful	5	fair	3												
			cooperative	2	helpful	3												
			adequate	2														
			enjoyable	2														
negative													questionable	2				
2. Saliency	necessary	4	necessary	4	necessary	2									necessary	3	necessary	2
			important	2														
3. Action	relaxing	2																
4. Potency																		
5. Function																		
6. Consequences					friends	2												
7. Consists of/Includes									knowledge	2	knowledge	2						
8. Contextual Allocation																		
9. Similarity/Contrast																		
10. Frequency	frequent	2							often	2								
	infrequent	2																
11. Quantity							many	2			plentiful	2						
							limited	2										
12. Cause for (Non)Occurrence																		
13. Manner of Occurrence																		

Table 8 (cont'd)

Response Categories	recognition for my work						my prestige at work						prestige of my job in the community					
	Data Processors	f	Secretaries	f	Automotive Mechanics	f	Data Processors	f	Secretaries	f	Automotive Mechanics	f	Data Processors	f	Secretaries	f	Automotive Mechanics	f
1. Description/Evaluation: positive	normal appreciative good	3 2 2	helpful	2	helpful good	2 2	good adequate helpful	5 2 2	good average	2 2	good average	4 2	excellent	2			good	4
negative															unknown	2		
2. Saliency			necessary	2	necessary	2									important necessary unimportant	4 2 2		
3. Action																		
4. Potency									little low	2 2			high	4	little	2	none	5
5. Function																		
6. Consequences	ego	2																
7. Consists of/Includes	promotion	2	appreciation	2	money	2												
8. Contextual Allocation																		
9. Similarity/Contrast																		
10. Frequency																		
11. Quantity	adequate	3	some	3	none	3												
12. Cause for (Non)Occurrence					experience	2					experience	2						
13. Manner of Occurrence					by others	2												

Table 8 (cont'd)

Response Categories	freedom to use my own judgment at work						my self-confidence at work						opportunities for self-fulfillment					
	Data Processors	f	Secretaries	f	Automotive Mechanics	f	Data Processors	f	Secretaries	f	Automotive Mechanics	f	Data Processors	f	Secretaries	f	Automotive Mechanics	f
1. Description/Evaluation: positive	helpful good adequate satisfying	2 2 2 2			good yes helpful	6 2 2	good fair	6 2	good	4	good helpful	11 3	open	2	good	5	good rewarding	8 2
negative																		
2. Saliency	necessary important	3 2	necessary	2	necessary	4	important necessary	2 2	necessary important	2 2	necessary	4	necessary	2	important	2		
3. Action							varies	2					varies	2				
4. Potency			limited often	4 2														
5. Function																		
6. Consequences																		
7. Consists of/Includes																	money	3
8. Contextual Allocation																		
9. Similarity/Contrast																		
10. Frequency									sometimes	2								
11. Quantity													limited many	2 2	little many few	2 2 2	none	2
12. Cause for (Non)Occurrence	encouraged	2	ability	2	experience ability	2 2	experience knowledge training	2 2 2	knowledge ability knowing	4 3 2	training experience	2 2						
13. Manner of Occurrence							performance	2										

Table 8 (cont'd)

Response Categories	feeling of accomplishment at work						daydreaming at work					
	Data Processors	f	Secretaries	f	Automotive Mechanics	f	Data Processors	f	Secretaries	f	Automotive Mechanics	f
1. Description/Evaluation: positive negative	good	3	good great	4 2	good	7						
2. Saliency	necessary	2	important worthwhile	2 2	necessary	2	necessary	2				
3. Action												
4. Potency	high	2	none	2								
5. Function												
6. Consequences	pride	2										
7. Consists of/Includes												
8. Contextual Allocation												
9. Similarity/Contrast												
10. Frequency			sometimes	2					infrequent	2	sometimes seldom	3 2
11. Quantity							very little	2	none little	2 2	no none	4 3
12. Cause for (Non)Occurrence					money	3	boredom	2	no time	3		
13. Manner of Occurrence												

Table 9

Responses to Work-Related Phrases Representing Working Conditions: By Occupation, Category, and Frequency

Response Categories	my working conditions						my working hours						equipment used on my job					
	Data Processors	f	Secretaries	f	Automotive Mechanics	f	Data Processors	f	Secretaries	f	Automotive Mechanics	f	Data Processors	f	Secretaries	f	Automotive Mechanics	f
1. Description/Evaluation: positive	good	4	good	5	good	7	busy	3	good	6	ok	6	good	3	excellent	3	fair	3
	excellent	3	pleasant	4	fair	4	good	3			good	4	modern	3	good	3	helpful	2
	clean	2	enjoyable	4	safe	2	satisfying	2			fair	4	reliable	2	new	3		
	fair	2	clean	2	clean	2	enjoyable	2					new	2	adequate	2		
	improving	2	friendly	2	ok	2							adequate	2	helpful	2		
			warm	2														
negative					could be better	3			long	2	long	4					old	3
					dirty	2					too early	2						
2. Saliency	important	4							necessary	2					necessary	3	necessary	3
															important	2		
3. Action	relaxed	2	unpressured	2			busy	3	busy	2	vary	2	fast	3				
													interesting	2				
4. Potency																		
5. Function																		
6. Consequences																		
7. Consists of/Includes			light	2	space	2			eight-to-five	2	eight-to-five	3	computer	5	typewriter	8	jack	2
													paper	2	phone	5	bench	2
															adding machine	3		
															pencils	2		
															pens	2		
															paper	2		
															dictaphone	2		
															files	2		
															postage machine	2		
8. Contextual Allocation																	mine	2
9. Similarity/Contrast																		
10. Frequency																		
11. Quantity									eight	2								
12. Cause for (Non)Occurrence																		
13. Manner of Occurrence																		

Table 9 (cont'd)

Response Categories	my overtime work						my coffeebreaks					
	Data Processors	f	Secretaries	f	Automotive Mechanics	f	Data Processors	f	Secretaries	f	Automotive Mechanics	f
1. Description/Evaluation: positive					helpful	2	helpful	2	good helpful	3 2		
negative			unfair	2			short	2	short	4	short	4
2. Saliency	necessary important unnecessary	6 2 2	not necessary unnecessary unnecessary necessary	2 2 2 2	necessary	2	necessary useful	2 2	necessary needed	5 2		
3. Action							relaxing	3	relaxing	2	relaxing	2
4. Potency												
5. Function												
6. Consequences	no pay	2	compensation	2	money more money	2 2						
7. Consists of/Includes									friends talk	2 2	rest	2
8. Contextual Allocation												
9. Similarity/Contrast												
10. Frequency			infrequent rare	3 2								
11. Quantity			none very little	4 3	none	6					all day	2
12. Cause for (Non)Occurrence												
13. Manner of Occurrence												

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Table 10

Responses to Work-Related Phrases Representing Supervision: By Occupation, Category, and Frequency

Response Categories	my supervisor						supervisor's ability to handle people						interaction with my supervisor					
	Data Processors	f	Secretaries	f	Automotive Mechanics	f	Data Processors	f	Secretaries	f	Automotive Mechanics	f	Data Processors	f	Secretaries	f	Automotive Mechanics	f
1. Description/Evaluation: positive	fair	4	friendly	5	helpful	6	fair	3	great	4	good	9	good	6	good	6	good	8
	ok	3	considerate	4	friendly	4	under-standing	3	good	4	fair	5	helpful	3	friendly	4	ok	3
	friendly	3	intelligent	3	good	2	adequate	2	fair	3	ok	3			cooperative	3	helpful	3
	helpful	3	kind	3	fair	2	good	2	tactful	3	helpful	2			kind	2		
	good	2	fair	2	ok	2			friendly	3					great	2		
	knowledge-able	2	good	2	smart	2			easy	3					honest	2		
	under-standing	2	thoughtful	2					capable	2					under-standing	2		
	experienced	2	nice	2											helpful	2		
			great	2														
			knowledge-able	2														
			helpful	2														
negative							poor	2	not good	2								
2. Saliency							necessary	2	necessary	3			necessary	4	important	4	necessary	2
															necessary	3		
3. Action	easy going	2	efficient	2					calm	2								
4. Potency																		
5. Function																		
6. Consequences																		
7. Consists of/Includes																		
8. Contextual Allocation																		
9. Similarity/Contrast					friend	2												
					boss	2												
10. Frequency																		
11. Quantity																	none	2
12. Cause for (Non)Occurrence																		
13. Manner of Occurrence																		

Table 10 (cont'd)

Response Categories	supervisor's evaluation of my work					
	Data Processors	f	Secretaries	f	Automotive Mechanics	f
1. Description/Evaluation:						
positive	good	4	good	7	good	8
	fair	4	appreciative	2	helpful	5
	accurate	2				
negative					poor	2
2. Saliency	important	2	important	2	necessary	3
3. Action						
4. Potency						
5. Function						
6. Consequences						
7. Consists of/Includes						
8. Contextual Allocation						
9. Similarity/Contrast						
10. Frequency						
11. Quantity			none	2	none	2
12. Cause for (Non)Occurrence						
13. Manner of Occurrence						

Table 11

Responses to Work-Related Phrases Representing Company and Union: By Occupation, Category, and Frequency

Response Categories	company policies on my job						handling of grievances on my job						the union on my job					
	Data Processors	f	Secretaries	f	Automotive Mechanics	f	Data Processors	f	Secretaries	f	Automotive Mechanics	f	Data Processors	f	Secretaries	f	Automotive Mechanics	f
1. Description/Evaluation: positive	good	3	reasonable	2	good	4	fair	2	fair	2	good	2			helpful	2		
	fair	3	fair	2	fair	3			adequate	2					good	2		
			good	2	ok	3												
			agreeable	2	helpful	2												
negative			unfair	2			poor	2	poor	2	poor	2						
2. Saliency			necessary	3			necessary	2					unneeded	2	necessary	2	needed	2
													unnecessary	2			unnecessary	2
3. Action	flexible	2																
4. Potency																		
5. Function																		
6. Consequences																		
7. Consists of/Includes					on time	2												
					clean	2												
8. Contextual Allocation																		
9. Similarity/Contrast																		
10. Frequency									few	2								
11. Quantity													none	5	none	11	none	14
													non-existent	3				
12. Cause for (Non)Occurrence																		
13. Manner of Occurrence							under-standing	3	channels	3								
									under-standing	2								

Table 12

Responses to Work-Related Phrases Representing Compensation: By Occupation, Category, and Frequency

Response Categories	my pay						my opportunities for promotion						my fringe benefits					
	Data Processors	f	Secretaries	f	Automotive Mechanics	f	Data Processors	f	Secretaries	f	Automotive Mechanics	f	Data Processors	f	Secretaries	f	Automotive Mechanics	f
1. Description/Evaluation: positive	fair	3	good	7	good	6			possible	2	good	2	helpful	5	helpful	6	good	3
			better	2	fair	4							good	2	good	5	are good	2
			fair	2	could be better	3							adequate	2	adequate	2	fair	2
																	ok	2
negative									improbable	2							could be better	2
2. Saliency	necessary	2													necessary	3		
															important	2		
3. Action					varies	2												
4. Potency																		
5. Function																		
6. Consequences																		
7. Consists of/Includes													insurance	2	insurance	4	insurance	3
													retirement	2	retirement	3	vacation	2
													walk	2	vacation	3	uniforms	2
															medical insurance	2		
8. Contextual Allocation																		
9. Similarity/Contrast																		
10. Frequency																		
11. Quantity	adequate	6	not enough	2	not enough	2	none	2	limited	2	none	5	many	2	many	3	none	2
	inadequate	3	average	2	could be better	3	many	2										
	ample	2																
12. Cause for (Non)Occurrence							accuracy	2	ability	2								
									me	2								
									knowledge	2								
									experience	2								
									education	2								
13. Manner of Occurrence																		

Evaluative Dominance Index (EDI), suggested by Szalay and Lysne (1970), was used to index the dominance of positive or negative valuative responses as a portion of all the responses given by two or more workers to each stimulus phrase by each occupational group. The term "affective" was substituted for the term "evaluative" in the name for the index since the response distributions were determined to represent several dimensions of affect: emotion, interest, feelings, and values. Collectively, these dimensions parallel those outlined by Krathwohl et al. (1964) and support the conceptualization of affect offered in Chapter I. The ADI was computed for each stimulus phrase and separately for each occupational group as follows:

Affective Dominance Index (ADI) =

$$\frac{\Sigma \text{ positive responses, frequencies} \geq 2 \; - \; \Sigma \text{negative responses, frequencies} \geq 2}{\Sigma \text{all responses, frequencies} \geq 2} \times 100$$

The ADI ranges in numerical value between plus and minus 100. The sign indicates the direction of the affect (i.e., plus for a positive direction and a minus sign for a negative direction), and the numerical value reflects intensity of affect. Responses to each stimulus phrase were first judged as positive, negative, or neutral in value. Subsequently, the totals were used in the computation of the ADI's which are reported in Table 13, by stimulus phrase and occupation.

With few exceptions, the entries in Table 13 are positive, reflecting the overwhelming percentage of responses judged as indicating positive valuation. Overall, the table indicates that the subjects viewed their work environments much more positively than negatively. Similarly, Gottleib (1973) reported that the majority of 1,860 male and female college seniors expressed favorable attitudes toward work and saw work as a critical and necessary part of life. Thus, a positive view of the work ethic is not uncommon. In the following discussion of the occupation-specific content analyses, it was deemed unnecessary to repeatedly note positive associations. Instead, the reader should assume that the majority of the responses to each stimulus phrase were positive. The exceptions, those phrases which elicited a majority of negative responses, are noted and discussed. Tables 7-12 each represents one of the general work categories and each is discussed separately.

Job Content (Table 7). A relatively small contingent of computer data processors indicated that their jobs were boring, that there were few opportunities to do a variety of tasks and limited opportunities to do challenging work. The majority indicated just the opposite. Responses also indicated that the majority of computer data processors felt that on-the-job training was very good and their abilities were being well used; they felt competent and exercised control over their work pace. Data processors rated control of work pace the most important concept within this work category. Of the three occupations sampled, only data processors indicated that they associated their job with a career.

A relatively small but consistent number of secretaries felt some boredom on the job and characterized the work pace as slow. They felt they had limited chances to do challenging work and that much of their abilities were not being used. However, the variety of tasks accomplished seemed relatively high, which seemed to characterize the secretaries' job content as varied but less-than-demanding. Related to this, self-competence was rated high, suggesting that some secretaries had achieved a high level of competence in performing routine work. On-the-job training for secretaries was considered very necessary and important, which again suggested the need for additional, challenging work.

Table 13
Index of Affective Dominance: By Occupation, Work Category and Stimulus Phrase

Work Category	Data Processors	Secretaries	Automotive Mechanics
Job Content			
my job	44	61	62
my opportunities to do a variety of tasks	47	65	65
my opportunities to do challenging work	25	29	100
work methods used on my job	67	100	20
work pace used on my job	-23	-19	0
my control over work methods	100	100	37
my control over work pace	0	33	14
interference with my job	33	-33	33
use of my abilities at work	40	27	87
my competence at work	37	100	62
opportunities for on-the-job training	100	59	69
Avg.	52	50	50
General Need Satisfaction			
me at work	86	51	100
my job security	100	100	29
my fellow workers	100	77	100
interaction with my coworkers	76	100	90
opportunities to help others in the community	0	75	75
moral "rightness" of my job	33	100	100
recognition for my work	50	44	20
my prestige at work	100	0	100
prestige of my job in the community	100	17	11
freedom to use my own judgment at work	100	0	78
my self-confidence at work	54	50	82
opportunities for self-fulfillment	40	38	61
feeling of accomplishment at work	78	57	75
daydreaming at work	-33	-100	-75
Avg.	63	43	71
Working Conditions			
my working conditions	100	91	50
my working hours	100	50	32
equipment used on my job	71	39	29
my overtime work	33	09	57
my coffeebreaks	82	73	60
Avg.	77	52	46
Supervision			
my supervisor	100	100	91
supervisor's ability to handle people	71	86	100
interaction with my supervisor	100	100	78
supervisor's evaluation of my work	100	69	60
Avg.	93	89	82
Company and Union			
company policies on my job	100	69	73
handling of grievances on my job	22	15	0
the union on my job	-33	12	0
Avg.	30	32	24
Compensation			
my pay	62	47	29
my opportunities for promotion	0	-12	-43
my fringe benefits	65	64	25
Avg.	42	33	04
Total Average	61	49	51

Most automotive mechanics viewed their jobs positively and indicated that its most important function was as a source of income. The mechanics' jobs were seen as challenging and as ones that used their abilities which, collectively, seemed to be the key to why on-the-job training, self-competence, and control over work pace were rated very important and necessary. The work pace was fast, and some mechanics indicated no control over work pace or work method. Briefly, the automotive mechanics' jobs seemed to be demanding, challenging, and, in many cases, done strictly by the book, as fast as possible. The jobs were seen as rewarding, and it was possible to construe much of that reward as money.

Comparisons between occupations were facilitated by the occupationally-specific ADI's computed for each stimulus phrase. For example, the ADI's for each of the stimulus phrases within the Job Content category differentiated between the three occupations, with the exception of the ADI's for the stimulus phrases "my job" and "opportunities to do a variety of tasks." Further, the ADI's provided a useful affective summary index of the detailed content analyses. This allowed inter- and intra-occupational comparisons to be made at a glance. Thus, the ADI's indicated, for example, that atuomotive mechanics viewed their opportunities to do challenging work and on-the-job use of their abilities more positively than did either computer data processors or secretaries. As discussed above, content analysis of the associative responses supported this last conclusion. The ADI's also indicated that the secretaries felt more self-competence on the job and were more accepting of the methods used than were either data processors or automotive mechanics, and data processors felt that they had more control over the work pace than did secretaries or automotive mechanics. Both examples again illustrate that the ADI serves as a useful summary index for comparative purposes and that the index is sensitive to the polarity and intensity of attitude.

General need satisfaction (Table 8). Computer data processors characterized themselves as happy and efficient. They indicated a feeling of accomplishment and self-confidence at work and felt that they were free to use personal judgment. Computer data processing appeared to offer high job security and personal prestige on the job and in the community. Fellow workers were positively described, and interaction with co-workers was rated highly. To a lesser extent, data processors indicated that their work received recognition.

On the other hand, a number of data processors indicated that their opportunities for self-fulfillment and opportunities to help others was limited. Also, a few questioned the morality of their occupation. In general, computer data processing, as an occupation, seemed to satisfy the security, social, and autonomy needs and, to a lesser extent, the esteem and self-actualization needs.

Responses indicated that some secretaries were often bored and dissatisfied with their jobs. Secretaries indicated that their position had low prestige at work and in the community, there were few opportunities for self-fulfillment, and freedom to use personal judgment was limited. To a lesser extent, secretaries indicated that they lacked a feeling of accomplishment. A few responses indicated that some secretaries were critical of their fellow workers.

On the positive side, the secretaries indicated that their jobs were secure and morally defensible. Interaction with fellow workers was good, and opportunities to help others in the community was rated highly. The security and social aspects of the secretaries' jobs were the major sources of need satisfaction. The higher order needs, esteem, autonomy, and self-actualization, were evidently not part of the secretarial job structure.

Automotive mechanics responses to the stimulus phrase "me at work" included "clean," "fair," "honest," "neat," and "busy." Fellow workers and interaction with fellow workers were described positively. Mechanics indicated that they were self-confident in their work, and felt that freedom to use their personal judgment was a function of experiences and ability and was not otherwise limited. Responses further indicated that the morality of the occupation and opportunities to help others were viewed favorably. Prestige on the job was rated favorably and seen as a function of experience. Negatively speaking, auto mechanics indicated that job security was not guaranteed and surprisingly, not considered salient by a large number of subjects. Further, responses indicated that mechanics' prestige in the community was considered debatable.

Automotive mechanics' responses to the stimulus phrases "opportunities for self-fulfillment," "feeling of accomplishment at work," and "recognition for my work" revealed the important place that money occupied in the structure of their jobs. The responses to the three phrases indicated that opportunities for self-fulfillment and feelings of accomplishment were good, but that recognition for their work was sometimes not forthcoming. In all three phrases, the response "money" was present, suggesting that it was a salient factor in general need satisfaction. Overall, the auto mechanics' job structure was a better source of satisfaction for the relatively higher social, autonomy, and self-actualization needs than for security and esteem needs.

Comparisons between occupations for the General Need Satisfaction category of work revealed several similarities and differences in the structure of the work environment. With the noted exceptions, subjects in all occupations described themselves positively, felt self-confident, and saw their opportunities for self-fulfillment as somewhat limited. In general, subjects described their co-workers positively and unanimously viewed interaction with co-workers favorably.

Computer data processors enjoyed a more prestigous occupational position and indicated a higher feeling of accomplishment than did either secretaries or automotive mechanics. Both data processors and automotive mechanics were free to excercise more personal judgment than secretaries. Automotive mechanics alone stressed money as an important factor of the job and shared with data processors a high prestige at work. Secretaries viewed interaction with their co-workers as more important than did data processors or automotive mechanics. Finally, both data processors and secretaries indicated that job security was a more salient and more prevalent aspect of their jobs than did automotive mehchanics.

The ADI's reported for each stimulus phrase in Table 13 in general reflected the similarities and differences revealed by content analysis of associative responses in the General Need Satisfaction work category. Also, since the secretaries reported fewer sources of need satisfaction than did either data processors or automotive mechanics, the average ADI for all stimulus phrases within this work category rather accurately indicated a less positive ADI for secretaries than for automotive mechanics and data processors.

Working conditions (Table 9). Computer data processors indicated that overtime work was a relatively necessary part of the job and occurred, in some cases, without pay. The working hours were generally good and were busy. The equipment was considered modern and often interesting. Coffee breaks were relatively short, relaxing, necessary, and could even be useful. Data processors reported that the working conditions per se were good, and "my working conditions" was considered the most salient concept within this category.

Secretaries considered overtime as relatively unnecessary and unfair. They also indicated that overtime was rare and sometimes resulted in compensation, suggesting that some secretaries did not receive pay for their overtime work. The response "unfair" would support this contention. Related to this, some secretaries indicated that the working hours, while generally good, were long.

Secretaries rated the equipment that they used as a salient part of their environment and listed a number of different items that were often used. Responses further indicated that coffee breaks were relaxing and provided the chance to talk to friends. "Coffee breaks" was considered the most salient concept in this work category.

Automotive mechanics indicated that overtime was not common, but was helpful, and definitely meant more money. Responses further indicated that the mechanics working conditions were dirty and could be better, but this may have been a generally accepted part of the job. The working hours were sometimes long and could begin at an early hour. Coffee breaks were short and were considered an opportunity to rest. The equipment used by automotive mechanics was considered important and some responses indicated that the equipment was old.

Comparatively, computer data processors considered their working hours and the equipment used more favorably than did secretaries or automotive mechanics. Automotive mechanics were unique in viewing overtime positively. The ADI for stimulus phrases within this category, Working Conditions, again reflected the import of the content analyses. Data processors gave fewer negative responses overall than did the secretaries and considerably fewer than automotive mechanics, and this is accurately indicated by the average ADI for each occupation.

Supervision (Table 10). Computer data processors indicated that interaction with their supervisor was necessary, and a few data processors indicated that their supervisors' ability to handle people was poor.

Secretaries indicated that interaction with their supervisors was the most salient concept in this work category, reflecting the nature of the supervisor-secretary relationship. Relatively few of the secretaries' responses indicated that some supervisors' ability to handle people was not good.

The majority of automotive mechanics' responses indicated that the "supervisor's evaluation of my work" was the most necessary concept within this work category. However, a few responses indicated that for some mechanics the supervisors did not evaluate their work. A small number of automotive mechanics indicated that their supervisors' evaluation was poor.

In comparing occupations it was clear that stimulus phrases within the Supervision work category had collectively elicited responses with the highest positive level of valuations when compared to the other work categories. Both content analyses of associative responses and the average ADI's supported this conclusion. However, it was interesting to note that none of the subjects, in any of the three occupations, indicated that the supervisor was either necessary or important. These occupational content analyses of the responses to phrases within this work category essentially reflected the differences and similarities between the three occupations.

Company and union (Table 11). Computer data processors indicated that company policies were flexible and that the handling of grievances was usually an informal process. In addition, the union was seen as an unnecessary part of the job.

Secretaries indicated that there had been few grievances on the job and that these had been handled both formally and informally. However, the union was considered necessary by a few subjects.

Automotive mechanics appeared to disagree on the necessity of a union. Company policy concerning cleanliness and tardiness appeared to be an important aspect of the mechanics' jobs.

The majority of subjects in all occupations indicated that they did not belong to unions. Also, a small number of subjects in all occupations felt that the handling of grievances was poor. Only a few secretaries indicated that company policies were unfair.

Compensation (Table 12). The results of the occupational content analyses and comparisons between occupations have been combined in the following discussion of this work category.

Within the three occupations, secretaries alone considered fringe benefits a salient part of the job, and only automotive mechanics indicated that there were either limited or no fringe benefits. A few workers in each occupation indicated that pay was inadequate.

Computer data processors indicated that the chances for promotion varied and were perhaps keyed to performance. The majority of responses reported for both secretaries and automotive mechanics indicated that promotion was not generally a possibility; again, this was clearly reflected in the ADI's.

The content analyses of Tables 7-12 indicated that the use of response categories could aid in determining the psychological meaning of each stimulus phrase within occupations and could facilitate inter-occupational comparisons (research question four). Content analyses of categories allowed two aspects of the psychological meaning of the work environment, content and structure, to be determined in detail for each occupation. Further, the use of categories allowed detailed comparisons of similarities and differences between occupations for all aspects of the work environment.

Summary

Using the word association paradigm an attempt was made to determine the non-technical psychological meaning, especially the affective meaning, of the work environment for groups of workers in three different occupations. Methodologically, this was accomplished by first using work-related phrases as stimuli and instructing subjects to write responses that best expressed what they felt toward each stimulus and what it meant to them. Second, a dimensional analysis, by occupation, was performed on the responses. This was accomplished by first developing categories that were a function of associative responses given by subjects from all occupations and then separating these categorized associative responses by occupation. Finally, the ADI statistic was used to summarize the affectivity workers assigned to each of the stimulus phrases.

Content analyses of the categoriezed associative responses provided empirical support for the complexity of affect and for the intimate relationship between affect and cognition. Meaning often emerged as a pattern or structure of value-laden responses given to two or more stimulus phrases. For example, automotive mechanics indicated that their jobs were "rewarding," and the general

meaning of this word would ordinarily suggest that their jobs satisfied a broad range of needs. However, in view of the fact that the response "money" was also associated with self-fulfillment, recognition, and accomplishment, it was concluded that the automotive mechanic's job was primarily financially rewarding, and therefore the response "rewarding" was interpreted in a narrower sense.

Results of the content analyses provided essentially affirmative answers to the four research questions posed for this investigation. It was concluded that the present investigation, using the described methods, was effective in determining both the content and structure of the affective and descriptive meaning of the work environment for computer data processors, secretaries, and automotive mechanics. In addition, detailed similarities and differences were identified among the occupations.

CHAPTER VI

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

This investigation was concerned with the development of procedures and techniques to measure affect. Specifically, attempts were made to measure the content and pattern of affective meaning, in the form of verbalized feelings that workers use to describe their work environment; and the relation of that affective pattern to the more descriptive, cognitive meanings.

Impetus for the investigation was provided by the current need to establish affective objectives in career education. The need for affective objectives, in turn, required detailed information about the dimensions of affect that individuals actually use to structure their feelings about their jobs. There was, however, no single instrument available to assess the range of affective meaning assigned to the work environment. There were at least three reasons for the lack of an appropriate instrument. First, affect is complex and multidimensional and may include such variables as personal awareness, attitudes, interests, values, and personal characterization (Krathwohl et al., 1964). Also, affect is virtually inseparable from other, more cognitive based components of meaning. Therefore, since most affective assessment instruments were designed to exclude assessment of cognition and assess, at most, only two or three components of affect, they were considered inappropriate. It was assumed that a more appropriate measure should reveal the pattern of affectivity and the relation of that pattern to the cognitive domain. Second, an appropriate instrument did not exist because there was a lack of agreement on which variables in the affective domain should be assessed (Brown, 1971; Walther, 1970). Third, because affective development has traditionally been considered outside the scope of formal school-based education, there has been little demand to assess affective changes related to classroom instruction. It was noted that this view is changing and should no longer represent a barrier to instrument development. However, it was concluded that, for ethical reasons, only those dimensions of affect that are work-relevant or which facilitate self-development should be considered and assessed in the classroom and at work.

A consideration of the above barriers to the development of an appropriate instrument with which to investigate the work environment led to the conclusion that a set of systematic techniques and methods was needed to identify and assess (a) the multidimensional structure of work-related affect and its relation to the cognitive mediated structure of meaning of the work environment; (b) those affective dimensions relevant to the work environment, particularly those related to success; and, (c) the affective dimensions which facilitate self-development. Given these three criteria for an appropriate instrument to assess affect, a particularly promising method appeared to lie within the word association paradigm.

Associative techniques, in which a subject responds to a stimulus object by giving the first word, image, or thought that occurs to him, have been used successfully in explicating both affective and

cognitive mental processes (e.g., Jung, 1910; Wyman, 1925; Terwilliger, 1964). Moreover, associative techniques have been used to explicate specific psychological domains (e.g., the psychoanalytic domain; Rapaport, Gill, & Shafer, 1946). Finally, dimensional analyses of word associations have revealed multidimensional semantic structures of particular association networks (e.g., Reese, 1960; Bousefield, 1957). It was concluded, therefore, that the word association paradigm was appropriate for the present research goals. That is, such material should delineate associative processes specific to the work environment and should provide means to determine both the content and structure of those processes.

The present investigation was conceived as an attempt to develop procedures which could be used to assess work-relevant affect. The undertaking was considered an exploratory effort which, if successful, would suggest a method by which work-relevant affect, a complex phenomenon, could be comprehensively assessed.

Stimulus Word List Development

Words given as responses by workers to stimulus objects were assumed to be verbal tags or labels for underlying concepts. It was further assumed that to assess work-relevant affect, the list of stimulus words presented to workers should be representative of a comprehensive list of aspects or categories within the work environment. A review of occupationally related literature, along with a subsequent nine-member panel review identified the following important categories within the work environment:

Job Content: All of the intrinsic aspects of the work itself (but not including those aspects listed under General Need Satisfaction, below) including the subcategories Assignment and Perceived Complexity of Tasks; Control of Work Methods and Work Pace; and Skills and Abilities of Workers.

General Need Satisfaction: A hierarchy of basic needs including the subcategories Security, the desire for a predictable, structured, reliable environment, and the desire for "fairness" and a familiar non-threatening environment; Social, the desire for belonging, the desire for association, for acceptance by one's fellows, for giving and receiving friendship; Esteem, the desire for reputation or prestige, status, dominance, recognition, attention, importance, or appreciation; Autonomy, the desire for independence and freedom, the desire for achievement, competence, mastery, adequacy and confidence; and Self-Actualization, the desire to realize one's own potential, the desire for growth and self-development.

Working Conditions: Included the physical aspects of the work environment; equipment used on the job, and the work methods and pace required.

Hours of Work: Included working hours, overtime work, coffeebreaks.

Supervision: Included relationships between the worker and his immediate supervisor.

Company and Union: Included aspects of the worker's immediate situation which are a function of organizational administration such as company policy, handling of grievance, and the presence or absence of a union.

Compensation: Included wages, financial or professional promotions and the fringe benefits of a job such as policies that prepare the worker for emergencies, illness, old age and hospitalization, holidays, leave and vacation.

Co-workers: Included relationships between worker and his fellow workers.

Attributes of Workers: Included relationships between workers and their fellow workers. to a wide range of occupations.

Adjectives: Those adjectives representative of the dimensions of affect ordinarily measured by the semantic differential technique (e.g., Osgood, Suci, & Tannenbaum, 1957). This included the evaluative (e.g., good-bad), potency (e.g., strong-weak), and activity (e.g., active-passive) dimensions.

From the literature discussing each of the work categories, a sample of 211 stimulus words was selected by the investigators to reflect each category (see Table 1, p.15). From this total the investigators selected 100 words, considered representative of the ten work categories, for use in the first of the two experiments.

Experiment I

Experiment I attempted to use word association techniques to determine the hierarchical structure of the categories of the work environment and to determine the affective meaning workers assigned to stimulus words representing each of those categories. One hundred work-related stimulus words were presented to 10 automotive mechanics and 10 secretaries in either single-word or sentence-stem form. Each subject was asked to consider each word (or sentence-stem) in the context of his job and was given approximately 45 seconds to continuously write single word responses that would best tell what each word (or sentence-stem) meant to him and how he felt toward that aspect of his job.

Associative responses given to each stimulus word/sentence-stem were pooled across workers and occupations (see Appendix A). A Relatedness Coefficient (RC), suggested by Gaskoff and Houston (1963) was calculated between all possible pairs of stimuli. The RC statistic indexes the verbal relation of two stimuli based on both the rank order and the number of shared associative responses. Subsequently, a hierarchical factor analysis was performed on the RC Matrix. The resulting factor structure (see Figure 2, p. 24) proved difficult to interpret. A content analysis of the pooled associative response distribution for each stimulus revealed several reasons for the difficulty in interpretation. First, although the stimuli elicited a wide range of different responses, considered necessary in order to determine the associative meaning of the stimuli, the responses "work" and "job" were given to over 50% of the stimulus words. These responses, "work" and "job," artificially inflated the RC between many pairs of stimuli, which in turn, influenced the factor analytic reduction of the RC Matrix. Second, stimuli were interpreted in a wider context than the work

environment. Their meaning was apparently ambiguous to subjects or the subjects were not able to shield out non-job situations to which the stimuli were also appropriate. Therefore, the factor structure itself reflected something more than the structure of categories within the work environment. Third, the RC statistic was not sensitive to meaning-shifts that occurred when the same response was given to different stimuli. Thus, it only indexed a portion of the shared meaning between stimuli. Moreover, the RC statistic could not reflect the rich and unique meaning of responses given to each work-related stimulus word.

It was concluded that although the word association method could elicit a wide range of responses, reflecting both affective and cognitive processes, the three difficulties mentioned above had to be resolved before a meaningful assessment could be made of the structure of affective or cognitive meaning characteristic of different work environments.

Phrase List Development and Use in Experiment II

Experiment I indicated that single word or sentence stem stimuli lacked the specificity to prevent the responses "work" and "job" which were considered artifacts, and did not limit responses to those relevant to the work environment. This confounded the hierarchical factor analysis and prevented a clear content analysis of the responses. In an attempt to reduce the possibility that work-related stimuli would elicit such artifactual associative responses as "work" and "job" and to increase the possibility that responses would be relevant to only the work environment, a phrase form of stimuli was adopted (see Table 5, p. 31) for use in further investigation. The investigators examined the total stimulus word list by work category. Within each work category those single words that were intended to represent important aspects of the work environment were transformed to a concept phrase representative of that aspect. For example, the word "influence" was transformed to the two phrases "my control over work pace" and "my control over work methods." Overall, transforming single-word stimuli into phrase form reduced the number of discrete work categories from ten to five and the number of stimuli from 100 to 40.

Experiment I also indicated that the RC overlap measure could not reflect all of the many different responses given to each stimulus word. This phenomenon combined with the ambiguity of the single-word and sentence-stem stimuli to further confound interpretation of the hierarchical factor analysis. It was concluded further that dimensional analysis of stimulus words, such as the factor analytic solution used in Experiment I, was inadequate because insufficient information was recovered from the raw data. Instead, in future investigations, a dimensional analysis of the response words themselves would be more desirable. A literature review concerning the development of response categories in word association research indicated that dimensional analysis of associative response words was feasible, and a method suggested by Kreitler and Kreitler (1968) was adopted for use in Experiment II.

In Experiment II the 40 work-related phrases were presented to 19 automotive mechanics, 19 secretaries, and 19 computer data processors. Procedures, including instructions, were essentially the same as those used in Experiment I, with the exception that subjects were instructed to write multiple-word responses if they were unable to think of a single word. It was felt that the use of stimulus phrases instead of single words, followed by a successful dimensional analysis of responses to those phrases, would reveal the pattern of affect and its relation to other more cognitive meanings characteristic of the work environment.

Associative responses given by all 57 subjects were pooled for each of the 40 stimulus phrases. A response was pooled only when it was given in response to a stimulus phrase by at least two subjects. Using a method of judgment suggested by Kreitler and Kreitler (1968), response word categories were developed as a function of the associative responses themselves. Three judges, including the investigators, found that 13 categories would account for 99.87% of all responses. These categories are listed below along with their percent of use (See pp. 37-38 for full category definition, and Tables 7-12 for the categorical distribution of associative responses.).

Table 14

Response Categories and Their Percent of Use

Response Categories	Percent of Use
Description or evaluation of the referent	52.10%
Referents' saliency	10.23
What the referent consists of or includes	7.46
Referents' quantity or amount	7.05
Referents' action(s) or potential for action(s)	5.76
Causes for referents' occurrence/non-occurrence	5.49
Referents' frequency of occurrence	5.34
Referents' potency	1.89
Consequences which result from the referent's existence or from a certain activity it does	1.60
Referents' function, purpose or role	1.21
Referents' manner of occurrence	0.98
Referents' similarity or contrast	0.61
Referents' contextual allocation	0.15

Content analysis of the pooled, categorized data indicated that few artifactual responses were present (e.g., "work" and "job" rarely occurred) and that subjects did indeed confine their responses to those relevant to the work environment. Following the development of response word categories, the pooled responses were sorted by occupation to facilitate inter- and intra-occupational comparisons. This allowed detailed analysis of occupational similarities and differences in content and structure of meaning. An Affective Dominance Index suggested by Szalay and Lysne (1970) proved to be a sensitive summary statistic which reflected the direction and intensity of the affective responses expressed by each occupational group toward each of the 40 work-related phrases.

Overall, the results of Experiment II indicated that people overwhelmingly associate positive affect with the work environment. This finding was considered as general support for a positively valenced work ethic. This phenomenon brought the negative meaning characteristic of the work environment into relief and provided further insight into the structural relationship between positive and negative valuation. A brief summary of the major occupational comparisons, by work category, follows. Additional findings, especially within each occupation have been discussed in Chapter V.

Job content. Automotive mechanics viewed opportunities to do challenging work and the use of their abilities more positively than did either computer data processors or secretaries. Secretaries felt more self-competence on the job, and were more accepting of the methods used than did either data processors or automotive mechanics. Computer data processors felt that they had more control over their work pace than did secretaries or automotive mechanics.

General need satisfaction. Overall, the automotive mechanics saw their jobs as a better source of satisfaction for the social, autonomy, and self-actualization needs than for the security and esteem needs. For secretaries, the security and social aspects of the job were the major sources of need satisfaction. The higher order needs, esteem, autonomy and self-actualization were evidently not adequately met by the secretaries' job structure. Computer data processors generally reported that their occupation satisfied security, social, and autonomy needs; and, to a lesser extent, the esteem and self-actualization needs. Data processors enjoyed a more prestigious occupation and indicated a higher feeling of accomplishment than did either secretaries or automotive mechanics. Both data processors and automotive mechanics were more free to exercise personal judgment in performance of job activities than were secretaries. Automotive mechanics alone stressed money as an important factor of the job. They also shared with data processors a feeling of high prestige on-the-job. Secretaries viewed interaction with their co-workers as more important than did computer data processors or automotive mechanics.

Working conditions. Overall, computer data processors gave fewer negative associative responses than the secretaries, and considerably fewer than automotive mechanics. Data processors considered their working hours and the equipment used more favorably than did secretaries or automotive mechanics. Overtime was quite common and considered necessary by data processors; overtime was less common for secretaries (who viewed it negatively) and for automotive mechanics (who viewed it as financially rewarding).

Supervision. Stimulus phrases within this work category collectively elicited associative responses with the highest positive level of valuations, when compared to other work categories. Data processors and secretaries indicated that interaction with their supervisors was more salient than did automotive mechanics. None of the subjects in the sample considered their supervisors necessary or important in the context of their work environment.

Company and union. Only secretaries indicated a generally positive view of unions. The majority of all subjects did not belong to unions. However, a few subjects in all occupations felt that the handling of grievances was poor.

Compensation. A few subjects from each occupation indicated that pay was adequate. Automotive mechanics and secretaries indicated that promotion is not generally a possibility.

These data empirically reveal multiple aspects or dimensions of affect and they emphasize the need to consider the pattern of those dimensions in any assessment of meaning found in the work environment.

Limitations of the Present Investigation

It is appropriate here to point out certain additional limitations of the study that must be taken into account when considering the results. In an earlier discussion (pp. 6-7) it was noted that the present effort was an attempt to outline a method to assess complex affective variables. It was viewed as a first step toward bridging the gap between awareness of the importance of affective variables in job performance, and establishing affective objectives for use in the classroom. The following additional considerations are appropriate.

The first limitation on the interpretation of the results is concerned with the size and occupational range of the subjects sampled. A deliberate attempt was made to sample diverse occupations. Automotive mechanics were viewed as an occupational group that worked primarily with "things," whereas secretaries worked to a great extent with "people," and computer data processors worked primarily with "ideas" or "data." Nevertheless, these three groups are not necessarily representative of all occupations and the size of the samples of workers necessitate caution in the interpretation of results of the study.

A second limitation of the study is concerned with the judgment procedures used to establish associative response categories. Associative responses were grouped into response categories by only three judges. Although the method itself required full agreement among judges at critical points and the judgment tasks were not considered difficult, the small number of judges did not permit adequate assessment of their judgment ability. The time required to categorize response words is also a factor to be considered. Judges required from 6 to 10 hours each to categorize associative responses which was not considered burdensome. However, the time required to categorize word association data will increase as a function of the number of responses to be categorized. This, in turn, is a function of the total number of stimuli, the time that subjects are allowed to free associate, and the number of subjects in the experiment. Thus, the present method for categorization requires substantial amounts of time, which under some circumstances may be prohibitive.

Finally, it should be noted here that the present study included one unique procedure which would not be repeated in future investigations. The investigators found it difficult to transform each single stimulus word into a representative phrase form of stimulus. It was often necessary to re-examine the literature from which each single stimulus word was selected in order to determine the conceptual area that each phrase was to represent. The single word in isolation often failed to clearly delimit a portion of the work environment. In any future application of the present method which might require new work categories or where new lists of phrases must be derived for categories within a non-work environment, each phrase would be directly derived from literature describing the respective category. The intermediate step of first deriving single words would not be required.

Conclusions

It was concluded that the word association paradigm, using the methods described in Experiment II, was an effective technique to investigate both the content and structure of psychological meaning, especially the affective meaning of the work environment. In the present investigation the technique first elicited word associations to work-relevant phrases and then separated these associations into 13 response categories. These categories provided for a relatively detailed outline and descriptive summary of the subjects' occupational-specific affective structures. In addition, it was possible to draw rich and meaningful comparisons between the three different occupations.

It was also concluded that the method used for dimensional analysis had certain advantages. In the present investigation associative response word categories were not a priori categories. Rather, they were a function of the associative responses themselves. Moreover, the meaning, and therefore the category assignment of each response word, was determined in the context of its eliciting stimulus phrase, thereby accounting for any contextual meaning-shift that might occur when the same associative response was given to different stimuli.

Interpretation of the data was not difficult since the meaning of each response was readily derived in the context of each stimulus phrase. This indicated that a high level of expertise should not be required to interpret data collected by use of this methodology. Too, the methodology did not violate certain ethical concerns regarding invasion of privacy since specificity of the phrase-form concepts insured that only affect relevant to a particular environment was identified and assessed, and the subject was fully aware of the purpose of the conceptual phrases used. Also certain phrases used in the present investigation (e.g., "opportunities for self-fulfillment") insured that the workers could indicate the affect associated with their perceptions of opportunities for occupational self-development.

Perhaps the most important conclusion drawn from these exploratory efforts was that the present methodology was a technique with potential application to both the work environment and the classroom. That is, it was a highly flexible methodology. In regard to the work environment, the present list of work-related stimulus phrases was used to reveal common affective and cognitive variables for three different occupational settings: the automotive, secretarial, and computer data processing work environments. Moreover, the present work-related instrument could easily be expanded. Additional categories of words could be included (e.g., phrases concerning Communication) or present categories could be supplemented by additional work-related phrases to facilitate more detailed investigations of meaning in the work environment.

Flexibility is further evident in this method in that it could easily be adapted to the learning environment. The particular stimulus phrases, instructions, and examples given to subjects determine the desired associative response domain. Thus, the career educator, for example, might investigate the affective and related cognitive aspects of the learning situation, including the classroom and related areas of the educational environment, by developing lists of classroom/learning-related phrases representative of the educational environment.

Recommendations

The present methodology can be used in various ways to identify affective variables characteristic of an environmental setting, or subsequently to derive a more refined assessment instrument.

As noted in Chapter I, it cannot be used directly to establish affective objectives. In the final analysis, the career educator or curriculum developer must place empirical knowledge of work-related affect in a coherent theoretical framework that accounts for the positive or negative affect that emerges from person-environment interaction, and he must translate that information into affective learning objectives. The recommendations that follow are therefore primarily concerned with the problem of accurate assessment of affect and related cognition within a particular environmental setting:

1) The word association instrument and procedures described herein would be particularly helpful in systematically identifying the range of affect associated with the work environment. This could aid the educator in understanding what affect-related problems exist in the students potential work environment. The flexibility of this methodology suggests also that educators could easily adapt it to assess affect within the educational environment.

2) Since the responses elicited under this format were predominantly value-laden, this technique would be particularly useful in articulating differences between groups separated by, for example, different levels of satisfaction or dissatisfaction with the job or an educational program. This technique would also explicate detailed similarities and differences in affect between groups of students who exhibit successful and unsuccessful academic performance or between groups or workers who are considered satisfactory or unsatisfactory in job performance.

3) The present methodology could be used to track, or follow, developmental changes in affect. The word association technique has already been used successfully in tracking cognitive development in the classroom (Johnson, P., 1967). The present technique could be used to periodically assess changes in affect that have been identified previously as relevant throughout a course of instruction. Similarly, changes in affect that might occur between job entry and successful personal and interpersonal adjustment could be followed.

4) The clear structural dimensions of affect revealed in the content analysis of each occupation suggest that those dimensions could be used to construct comprehensive questions for determining the pattern of affective variables across each of the occupational groups. This instrument subsequently could be administered to larger, more adequate samples of workers in the three occupations. Results of this effort would more closely approximate a comprehensive assessment of work-related affect.

APPENDICES

APPENDIX A

A-1 Experiment I: Word Association Data Collection Instrument, Single Word Format

A-2 Experiment I: Response Distribution Pooled by Stimulus Word and Frequency

A-3 Experiment I: On Single-Word vs. Sentence-Stem Format and the Use of Adjective Stimuli.

APPENDIX A-1

Experiment I: Word Association Data Collection Instrument, Single Word Format.

INSTRUCTIONS FOR USE BY ADMINISTRATORS

Pass out the response booklets and pencils.

Hello, my name is [ ], and I am from The Center for Vocational Education at The Ohio State University. For those of you not familiar with The Center, it is a group of educational researchers. One of our major functions is the development and refinement of vocational and technical training programs. The procedure which we are administering today is part of a research program. This is a word association procedure and we are testing it for use in the area of curriculum development.

One of the vocational programs we are concerned with is the training of [ ]. This is why we have asked you especially to help us.

The first thing we would like you to do is to fill out the Background Information sheets that are attached to the booklets in front of you. Be assured that all the information requested will be held in confidence and that your name will not be used in any way.

Background Information sheets filled out.

If all of you have now finished filling out the Background Information sheets will you please give me your attention and I will now read the general instructions that you will follow in completing this questionnaire. Please stop me any time you have a question.

The following pages contain 105 words that are designed to find out what <u>work</u> means to people, and how they think and <u>feel</u> about their work. This questionnaire is intended to identify the many ways people think about work. It does not evaluate your performance as an employee. The results will be used for research only and, therefore, we trust that you will do your best to provide the necessary information. For each word you are asked to write down as many other words as you can think of in a short period of time.

On each page a key word representing an idea relating to work is printed 15 times. Open your booklets to about the middle page and you can see how this looks. Each repetition is followed by a blank space. You are to write in the blank spaces as many <u>different</u> words that the key word makes you think of. Each response should consist of only one word. Many of the key words are related to work, that is, they refer to work and will always make you think of your job. The word "supervisor" is an example. Other words, such as "experience," are not necessarily related to work. However, you are to consider all of the key words as if they were related to your work. That way your response will identify the meaning each key word has in reference to your work situation. Be sure to think back to the key word after each word that you write because the point is to see how many and what other words the key words make you think of.

You will have 45 seconds to write as many words as you can think of which are related to the key word on each page. When a recorded tone sounds, begin writing responses to the key words on the first page. Each time the tone sounds, turn the page and begin writing words to the key word on the next page. Do not turn the page until the tone sounds. You will continue the procedure for 40 minutes and then there will be a stop for a short rest. Write as fast and as clearly as you can, but do not be too concerned about the proper spelling of the words. There are no right or wrong answers. You will have a chance to practice on a few words before we begin.

If you will now turn to the first page of your booklet you can see a completed example of the type of words you will encounter. It shows you the procedure you should follow. The word is "task," and it is repeated 15 times on a single page. I will go over the example with you.

In the spaces provided someone has written different words that came to their mind as they looked at the key word. All of their responses are different; they are single words and the person was presumably thinking about their work as they wrote. Therefore, they are appropriate responses.

Please note the richness of meaning that this person has given the word "task." They have described a task as an assignment; they see a task as work, but as a small part of their job; to them a task requires that they perform in some way; and finally they see a task as easy but boring. Some of these responses describe the key word. Some may indicate the job action implied by the key word. And some responses indicate feelings in relation to the concept identified by the key word.

To continue now, at the bottom of the page, it says that it is not necessary for you to fill in all 15 blanks or to try to write as many different kinds of responses for each key word as the person did to the key word "task." However, you should try to write all those responses that will best tell what the key word means to you in relation to your work situation.

Are there any questions? Before we start, I would like to remind you to always think back to the key word after each word that you write because the point is to see how many and what other kinds of words the key word makes you think of. Also you should try to write all of those responses that will best tell what the key word means to you and how it makes you feel in relation to work.

WORD ASSOCIATION

RESPONSE BOOKLET

The Center for Vocational Education
The Ohio State University
1960 Kenny Road
Columbus, Ohio 43210

BACKGROUND INFORMATION

NAME _____ CODE _____

CHECK YOUR AGE (IN YEARS): Less than 21 ( ) 21-25 ( ) 26-30 ( ) 31-35 ( ) 36-40 ( ) 41-45 ( ) 46 or more ( )

CHECK YOUR PRESENT JOB TITLE:

Receptionist ( ) Stenographer ( ) Legal Secretary ( )

Typist ( ) General Secretary ( ) Medical Secretary ( )

Executive Secretary ( ) Administrative Assistant ( )

Other (Please specify): _____

HOW MANY YEARS HAVE YOU WORKED FULL-TIME AT YOUR PRESENT JOB? _____

HOW MANY TOTAL YEARS HAVE YOU BEEN EMPLOYED FULL-TIME IN THIS OCCUPATION? _____

EDUCATION:

1. High School: Graduated from high school (or equivalent): Yes_____ No_____

2. Vocational training (check one response for each type of training):

	Years of Attendance						
	None	Less Than 1	1	2	3	4	5 or More
a. Vocational-technical in high school	___	___	___	___	___	___	___
b. Vocational-technical post-high school	___	___	___	___	___	___	___
c. Junior or community college	___	___	___	___	___	___	___
d. Four-year college or university	___	___	___	___	___	___	___
e. Military technical training school	___	___	___	___	___	___	___
f. Business school or business college	___	___	___	___	___	___	___
g. Formal company training program	___	___	___	___	___	___	___
h. Formal trade apprenticeship program	___	___	___	___	___	___	___
i. On the job experience	___	___	___	___	___	___	___
j. Other (specify) _____	___	___	___	___	___	___	___

3. After marking all of the above in question 2, also please circle one of the letters below indicating the one training situation where you learned most of your job skills (other than on the job experience).

a b c d e f g h i j

Thank you for your cooperation in completing this questionnaire.

BACKGROUND INFORMATION

NAME _____ CODE _____

CHECK YOUR AGE (IN YEARS):

Less than 21	21-25	26-30	31-35	36-40	41-45	46 or more
( )	( )	( )	( )	( )	( )	( )

CHECK YOUR PRESENT JOB TITLE:

Data Converting Operator ( )
Computer Console Operator ( )
Junior Programmer ( )
Programmer ( )
Lead Programmer ( )
Senior Programmer ( )
Systems & Procedures Analyst ( )
Systems Programmer ( )

Other (please specify): _____

HOW MANY YEARS HAVE YOU WORKED FULL-TIME AT YOUR PRESENT JOB? _____

HOW MANY TOTAL YEARS HAVE YOU BEEN EMPLOYED FULL-TIME IN THIS OCCUPATION? _____

EDUCATION:

1. High School: Graduated from high school (or equivalent): Yes _____ No _____

2. Vocational training (check one response for each type of training):

	Years of Attendance						
	None	Less Than 1	1	2	3	4	5 or More
a. Vocational-technical in high school	___	___	___	___	___	___	___
b. Vocational-technical post-high school	___	___	___	___	___	___	___
c. Junior or community college	___	___	___	___	___	___	___
d. Four-year college or university	___	___	___	___	___	___	___
e. Military technical training school	___	___	___	___	___	___	___
f. Business school or business college	___	___	___	___	___	___	___
g. Formal company training program	___	___	___	___	___	___	___
h. Formal trade apprenticeship program	___	___	___	___	___	___	___
i. On the job experience	___	___	___	___	___	___	___
j. Other (specify) _____	___	___	___	___	___	___	___

3. After marking all of the above in question 2, also please circle one of the letters below indicating the one training situation where you learned most of your job skills (other than on the job experience).

a b c d e f g h i j

Thank you for your cooperation in completing this questionnaire.

BACKGROUND INFORMATION

NAME _____ CODE _____

CHECK YOUR AGE (IN YEARS): Less than 21 ( ) 21-25 ( ) 26-30 ( ) 31-35 ( ) 36-40 ( ) 41-45 ( ) 46 or more ( )

CHECK YOUR PRESENT JOB TITLE:

Automotive Mechanic Apprentice ( )
Automotive Mechanic ( )
Service Advisor or Writer ( )
Job Specialist ( )
Other (please specify): _____

HOW MANY YEARS HAVE YOU WORKED FULL-TIME AT YOUR PRESENT JOB? _____

HOW MANY TOTAL YEARS HAVE YOU BEEN EMPLOYED FULL-TIME IN THIS OCCUPATION? _____

EDUCATION:

1. High School: Graduated from high school (or equivalent): Yes _____ No _____

2. Vocational training (check one response for each type of training):

	Years of Attendance						
	None	Less Than 1	1	2	3	4	5 or More
a. Vocational-technical in high school	___	___	___	___	___	___	___
b. Vocational-technical post-high school	___	___	___	___	___	___	___
c. Junior or community college	___	___	___	___	___	___	___
d. Four-year college or university	___	___	___	___	___	___	___
e. Military technical training school	___	___	___	___	___	___	___
f. Business school or business college	___	___	___	___	___	___	___
g. Formal company training program	___	___	___	___	___	___	___
h. Formal trade apprenticeship program	___	___	___	___	___	___	___
i. On the job experience	___	___	___	___	___	___	___
j. Other (specify) _____	___	___	___	___	___	___	___

3. After marking all of the above in question 2, also please circle one of the letters below indicating the one training situation where you learned most of your job skills (other than on the job experience).

a b c d e f g h i j

Thank you for your cooperation in completing this questionnaire.

DIRECTIONS

In the spaces provided someone has written different words that came to their mind as they looked at the key word. All of their responses are different; they are single words, and they were presumably thinking about their work as they wrote. Therefore, they are appropriate responses.

task work

task easy

task assignment

task boring

task small

task performance

task

task

task

task

task

task

task

task

task

It is not necessary for you to fill in all 15 blanks or to try to write as many different kinds of responses for each key word as the person did to the key word "task." However, you should try to write all those responses that will best tell what the key word means to you in relation to your work situation.

SAMPLE SHEET

absenteeism _____

absenteeism _____

absenteeism _____

absenteeism _____

absenteeism _____

absenteeism _____

absenteeism _____

absenteeism _____

absenteeism _____

absenteeism _____

absenteeism _____

absenteeism _____

absenteeism _____

absenteeism _____

absenteeism _____

absenteeism _____

SAMPLE SHEET

assignment _____

assignment _____

assignment _____

assignment _____

assignment _____

assignment _____

assignment _____

assignment _____

assignment _____

assignment _____

assignment _____

assignment _____

assignment _____

assignment _____

assignment _____

assignment _____

APPENDIX A-2

Experiment I: Pooled Response Distribution, by Stimulus Word and Frequency

absenteeism	FREQ
absenteeism	20.
bad	4.
sickness	4.
terrible	2.
sick	2.
unfortunate	2.

assignment	FREQ
assignment	20.
job	8.
work	7.
task	6.
easy	5.
duty	3.
time	3.
hard	3.
order	2.
do	2.
given	2.
responsibility	2.
good	2.
success	2.
boring	2.
challenge	2.
fun	2.
ability	2.
perform	2.

bonus	FREQ
bonus	20.
pay	5.
money	5.
extra	3.
work	3.
gift	3.
good	2.
raise	2.
deserved	2.
happy	2.
delightful	2.
Christmas	2.
earned	2.
use	2.
appreciation	2
performance	2.

boredom	FREQ
boredom	20.
easy	3.
bad	2.
unhappy	2.
repetition	2
job	2.
idle	2.
work	2.

cleanliness	FREQ
cleanliness	20.
good	5.
appearance	5.
work	4.
necessary	4.
important	3.
neatness	3.
job	3.
tool	3.
needed	2.
clean	2.
self-respect	2.
neat	2.
area	2.
pride	2.
impression	2.
self	2.
tidy	2.

coffeebreak	FREQ
coffeebreak	20.
rest	7.
needed	7.
relaxing	6.
time	6.
relax	4.
good	2.
short	2.
break	2.
leisure	2.

company policy	FREQ
company policy	20.
rule	7.
OK	3.
order	2.
rigid	2.
necessary	2.
job	2.
fair	2.
good	2.

confidence	FREQ
confidence	20.
good	6.
work	4.
helpful	4.
sure	3.
trust	3.
need	2.
performance	2.
able	2.
trusting	2.
secret	2.
ability	2.
job	2.
tool	2.

contribution	FREQ
contribution	20.
help	5.
job	4.
helpful	4.
give	4.
giving	3.
work	3.
good	3.
needed	2.
given	2.
aid	2.
self	2.

cooperation	FREQ
cooperation	20.
help	6.
necessary	5.
needed	5.
helpful	4.
work	4.
job	4.
good	4.
giving	3.
coworker	2.
supervisor	2.
together	2.
willingness	2.
people	2.

coworker	FREQ
coworkers	10.
coworker	10.
friend	8.
helpful	7.
help	4.
good	3.
helper	3.
willing	2.
assistance	2.
needed	2.
friendly	2.
harmony	2.
partner	2.
performance	2.
time	2.

customer	FREQ
customer	20.
friend	4.
buyer	4.
complaint	4.
interesting	3.
right	3.
work	2.
fair	2.
job	2.
needed	2.
person	2.
service	2.
necessary	2.
relation	2.
product	2.

decision	FREQ
decision	20.
helpful	3.
idea	2.
good	2.

decision (cont'd)	FREQ
easy	2.
supervision	2.
wrong	2.
strong	2.

discipline	FREQ
discipline	20.
necessary	6.
good	6.
bad	3.
behavior	2.
hard	2.
do	2.
needed	2.
boss	2.
fair	2.
helpful	2.

dismissal	FREQ
dismissal	20.
bad	5.
fired	4.
job	3.
firing	2.
out	2.
work	2.
failure	2.
discharge	2.
unnecessary	2.
going	2.
final	2.

duties	FREQ
duties	20.
job	7.
time	4.
work	3.
responsibility	3.
task	2.
repair	2.
many	2.
help	2.
needed	2.
clean	2.
important	2.

equipment	FREQ
equipment	20.
necessary	5.
tool	5.
good	4.
helpful	3.
needed	3.
important	3.
performance	2.
typewriter	2.
useful	2.
job	2.
help	2.
fun	2.
repair	2.
ability	2.
working	2.
well	2.

experience	FREQ
experience	20.
helpful	5.
necessary	4.
time	4.
training	3.
knowledge	3.
job	3.
skill	3.
good	3.
work	3.
schooling	2.
needed	2.
efficient	2.
performance	2.
understanding	2.

failure	FREQ
failure	20.
bad	4.
loss	4.
job	3.
unable	2.
saddening	2.
unfortunate	2.
time	2.
try	2.
undependable	2.
good	2.
self	2.

fairness	FREQ
fairness	20.
equal	6.
job	4.
good	4.
pay	3.
time	3.
necessary	2.
right	2.
ability	2.

fatigue	FREQ
fatigue	20.
tired	10.
work	5.
rest	3.
boring	3.
tiredness	2.
sleep	2.
busy	2.
performance	2.
rundown	2.
job	2.
task	2.

freedom	FREQ
freedom	20.
necessary	3.
work	3.
good	3.
time	3.
great	2.
fun	2.
procedure	2.
need	2.

grievance	FREQ
grievance	20.
union	3.
work	3.
gripe	2.
pay	2.
supervision	2.
unhappy	2.
time	2.
speakout	2.

influence	FREQ
influence	20.
friend	3.
helpful	3.
good	2.
supervisor	2.
help	2.
bad	2.
coworker	2.
knowledge	2
job	2.
ability	2.
performance	2.

initiative	FREQ
initiative	20.
work	5.
job	3.
ability	3.
learn	3.
desire	2.
drive	2.
trying	2.
will	2.

intelligence	FREQ
intelligence	20.
knowledge	5.
ability	4.
helpful	3.
performance	2.
work	2.
experience	2.
training	2.
skill	2.
thought	2.
good	2.
know	2.
sense	2.
supervisor	2.
time	2.
money	2.

interference	FREQ
interference	20.
bad	4.
supervisor	3.
job	3.
time	3.
boss	2.
problem	2.
unnecessary	2.
delay	2.
ability	2.

job knowledge	FREQ
job knowledge	20.
experience	7.
skill	5.
ability	5.
necessary	4.
training	4.

job knowledge (cont'd)	FREQ
know how	3.
helpful	3.
school	3.
understanding	2.
learned	2.
initiative	2.
work	2.
learning	2.
performance	2.

job title	FREQ
job title	20.
position	5.
experience	3.
work	3.
respect	3.
status	2.
distinction	2.
performance	2.
ability	2.
promotion	2.
security	2.
fair	2.
good	2.

judgement	FREQ
judgement	20.
decision	5.
good	3.
needed	3.
unfair	2.
helpful	2.
fair	2.
right	2.
performance	2.
some	2.
critical	2.

layoff	FREQ
layoff	20.
bad	4.
money	4.
job	4.
work	3.
insecurity	3.
no	2.
bill	2.
time	2.

lighting	FREQ
lighting	20.
bright	5.
good	5.
poor	3.
see	3.
needed	3.
important	3.
necessary	2.
bulb	2.
performance	2.
clear	2.
helpful	2.
bad	2.
glaring	2

loyalty	FREQ
loyalty	20.
job	6.
trust	3.
good	3.
friend	3.
pride	2.
necessary	2.
security	2.

management	FREQ
management	20.
boss	5.
supervisor	4.
good	4.
help	3.
performance	3.
system	2.
work	2.
bad	2.
needed	2.
necessary	2.
relation	2.

morale	FREQ
morale	20.
good	4.
low	4.
high	4.
spirit	4.
performance	3.
satisfaction	2.
feeling	2.

important	2.
happy	2.
enjoyment	2.
attitude	2.
work	2.

negotiation	FREQ
negotiation	20.
talk	5.
agreement	4.
union	3.
good	3.
pay	2.
meeting	2.
fair	2.
discussion	2.
discuss	2.
necessary	2.
bad	2.

noise	FREQ
noise	20.
loud	6.
irritating	4.
performance	4.
distracting	3.
distraction	3.
sound	2.

overtime	FREQ
overtime	20.
money	7.
work	6.
pay	5.
extra	3.
time	3.
necessary	3.
busy	3.
OK	2.
tired	2.
need	2.
helpful	2.
late	2.

pay	FREQ
pay	20.
money	5.
necessary	5.
time	4.
good	3.
job	3.
work	3.
rewarding	2.
high	2.
low	2.
reward	2.
helpful	2.
security	2.
raise	2.
check	2.
life	2.
earned	2.

pay raise	FREQ
pay raise	20.
money	5.
good	5.
promotion	5.
needed	4.
work	4.
job	3.
time	3.
experience	3.
happy	2.
merit	2.
increase	2.
security	2.
encouragement	2.
acceptable	2.
deserved	2.

pension	FREQ
pension	20.
retirement	6.
money	5.
needed	4.
security	4.
earned	3.
help	3.
age	3.
good	2.
pay	2.
helpful	2.
time	2.
saving	2.
future	2.
deserved	2.

personality	FREQ
personality	21.
good	4.
friend	3.
helpful	3.
job	3.
people	3.
performance	2.
character	2.
help	2.
worker	2.
well	2.
deadline	2.
easier	2.
cooperation	2.

praise	FREQ
praise	20.
helpful	6.
good	5.
work	4.
reward	3.
deserved	3.
necessary	2.
improvement	2.

prejudice	FREQ
prejudice	21.
against	4.
wrong	2.
biased	2.
unfair	2.
irritable	2.
unnecessary	2.
bad	2.

pride	FREQ
pride	20.
work	7.
job	7.
self	3.
good	3.
ability	3.
needed	3.
important	3.
performance	2.
helpful	2.
quality	2.

production	FREQ
production	20.
work	8.
quality	5.
performance	4.
job	4.
speed	3.
necessary	3.
ability	3.
rate	2.
completion	2.
finish	2.
good	2.
time	2.
amount	2.
money	2.
fast	2.

promotion	FREQ
promotion	20.
raise	5.
money	4.
good	3.
earned	3.
desired	2.
important	2.
pay	2.
responsibility	2.
knowledge	2.
ability	2.
work	2.
deserved	2.
great	2.
progress	2.
pride	2.
efficient	2.
all	2.

recognition	FREQ
recognition	20.
ability	3.
good	3.
acknowledgement	2.
knowing	2.
pride	2.
remember	2.
know	2.
see	2.
performance	2.
responsibility	2.
job	2.
enjoyment	2.
type	2.
learn	2.

relaxation	FREQ
relaxation	20.
break	5.
rest	4.
vacation	4.
necessary	3.
good	3.
lunch	3.
tired	2.
helpful	2.
quitting time	2.
easy	2.
needed	2.
job	2.
home	2.

repetition	FREQ
repetition	20.
boring	8.
job	5.
dull	4.
work	4.
necessary	3.
repeat	3.
again	3.
good	2.
monotonous	2.
over	2.
tiring	2.

reprimand	FREQ
reprimand	20.
good	3.
discipline	2.
helpful	2.
bad	2.
inefficient	2.
learn	2.

reputation	FREQ
reputation	20.
good	11.
bad	4.
character	3.
work	2.
performance	2.
quality	2.
known	2.
personality	2.
honest	2.
unchanging	2.

retirement	FREQ
retirement	20.
fun	4.
rest	3.
pension	3.
earned	3.
relaxation	3.
age	2.
sixty-five	2.
security	2.
money	2.
old	2.
benefit	2.
leisure	2.
plan	2.
work	2.
good	2.
pleasure	2.
future	2.
year	2.

satisfaction	FREQ
satisfaction	20.
job	7.
work	7.
ability	3.
pride	3.
self	2.

satisfaction (cont'd)	FREQ
efficient	2.
happy	2.
quality	2.

schedule	FREQ
schedule	20.
time	13.
work	4.
list	3.
routine	2.
performance	2.
rigid	2.
daily	2.
job	2.
timely	2.
necessary	2.
helpful	2.

security	FREQ
security	20.
job	10.
money	5.
work	4.
family	4.
love	3.
ability	3.
assurance	2.
pay	2.
insurance	2.
friend	2.
knowledge	2.

self-expression	FREQ
self-expression	20.
good	4.
work	3.
helpful	3.
idea	2.
important	2.
necessary	2.
freedom	2.
time	2.
open	2.
write	2.
stifled	2.

self-fulfillment	FREQ
self-fulfillment	20.
job	4.
pride	4.
good	3.
goal	3.
pleasure	2.
peace	2.
achievement	2.
task	2.
neat	2.

self-reliance	FREQ
self-reliance	20.
ability	5.
dependable	2.
good	2.
job	2.
knowledge	2.
experience	2.
needed	2.
performance	2.

seniority	FREQ
seniority	20.
experience	7.
time	6.
age	4.
union	3.
knowledge	3.
security	2.
earned	2.
work	2.
length	2.
job	2.
status	2.
skill	2.
supervisor	2.
ability	2.

sick pay	FREQ
sick pay	20.
helpful	5.
good	4.
needed	4.
money	4.
leave	3.
sick	2.
earned	2.
illness	2.
beneficial	2.
off	2.
advantage	2.
benefit	2.
time	2.
necessary	2.

skill	FREQ
skill	20.
knowledge	6.
job	6.
necessary	4.
work	4.
typing	3.
ability	3.
talent	3.
experience	3.
learned	3.
trade	3.
helpful	2.
developed	2.
performance	2.
used	2.
accurate	2.
useful	2.
important	2.
task	2.

specialist	FREQ
specialist	20.
job	3.
research	3.
needed	3.
work	2.
motor	2.
brake	2.
necessary	2.
skilled	2.
knowledgeable	2.
knowledge	2.
field	2.
interesting	2.
trained	2.
experienced	2.
car	2.
special	2.

status	FREQ
status	20.
position	5.
work	4.
experience	3.
knowledge	3.
time	2.
pride	2.
power	2.
important	2.
earned	2.
place	2.
high	2.
long	2.
ability	2.

success	FREQ
success	20.
job	5.
money	5.
work	4.
great	3.
fulfillment	3.
pride	3.
good	2.
accomplish	2.
rewarding	2.
ability	2.
happy	2.
pay	2.
time	2.
reward	2.

suggestion	FREQ
suggestion	20.
helpful	7.
help	5.
idea	5.
useful	3.
needed	2.
unnecessary	2.

100

supervision	FREQ
supervisor	20.
boss	7.
helpful	6.
needed	3.
good	2.
bad	2.
understanding	2.

temperature	FREQ
temperature	20.
hot	7.
cold	6.
heat	4.
comfortable	2.
room	2.
performance	2.
comfort	2.
work	2.
heated	2.
need	2.
control	2.
air	2.

tension	FREQ
tension	20.
pressure	4.
nervousness	3.
people	3.
work	3.
problem	2.
tired	2.
irritable	2.
time	2.
rush	2.
boss	2.
ability	2.
quality	2.
performance	2.

training	FREQ
training	20.
necessary	6.
learning	5.
learn	5.
helpful	5.
school	5.
helpful	5.
school	5.
knowledge	5.
needed	4.
experience	4.
good	4.
job	3.
useful	3.
money	3.
program	2.
desire	2.
skill	2.
performance	2.
teacher	2.
ability	2.
beneficial	2.
time	2.
required	2.
fun	2.

union	FREQ
union	20.
helpful	4.
job	3.
dues	3.
group	3.
labor	2.
security	2.
powerful	2.
strike	2.
management	2.
benefit	2.

vacation	FREQ
vacation	20.
rest	7.
fun	6.
trip	4.
travel	4.
relax	3.
necessary	3.
needed	3.
pleasure	3.
time	3.
away	3.
break	3.
holiday	2.
earned	2.
hobby	2.
great	2.
relaxation	2.
pay	2.
help	2.
work	2.
leave	2.

variety	FREQ
variety	20.
interesting	5.
fun	4.
good	3.
job	3.
work	3.
desirable	2.
difference	2.
needed	2.
different	2.
performance	2.
task	2.
helpful	2.
routine	2.
enjoy	2.

willingness	FREQ
willingness	20.
work	5.
helpful	4.
learn	2.
do	2.
helping	2.
able	2.
use	2.
perform	2.
agreeable	2.
help	2.
job	2.

working hours	FREQ
working hours	20.
long	5.
time	4.
eight to five	3.
too long	3.
job	3.
boring	3.
good	2.
pay	2.
tiring	2.

work pace	FREQ
work pace	20.
slow	10.
fast	8.
busy	4.
speed	3.
easy	3.
time	3.
job	3.
steady	2.
efficient	2.
clean	2.
quality	2.
hectic	2.
hurry	2.

APPENDIX A-3

Experiment I: On Single-Word vs. Sentence-Stem Format and the Use of Adjective Stimuli

Experiment I: On Single-Word vs. Sentence-Stem Format and the Use of Adjective Stimuli

Problem

In addition to the primary research questions posed for these investigations, certain methodological questions were investigated concerning the effects of different formats of stimulus presentation and of stimuli consisting of different parts of speech.

Stimulus Format

The stimulus format used in a word association task has been found to influence, or restrict, the semantic level of response. For example, Nunnally and his associates (Nunnally, Flaugher & Hodges, 1963; Nunnally & Hodges, 1965) indicated that the format of the word association instrument itself will alter the semantic range of responses. Nunnally reported that a sentence-completion format induced subjects to give a high percentage of certain paradigmatic responses; for example, those that are descriptive. This suggests that a sentence-completion format will elicit a higher percentage of affective responses when compared with responses elicited by the more traditional single-word stimulus. However, Nunnally used only the sentence-completion format and did not, therefore, make the comparison. In the present investigation, both single-word and sentence-completion formats were used in an attempt to determine whether the sentence-completion format, when compared to the single-word format, would elicit responses judged higher in affective content.

Adjective Stimuli

In Chapter III of this document it was assumed that the instructions given to subjects would establish a work-related context or "set." Given the assumption that each adjective stimulus would elicit responses which represent different physical and abstract aspects of the work environment, then a relatively easy match could be made between level of affect (as defined by the adjective stimulus) and aspects of the work environment (as defined by associative responses). Subsequently, such a match could be compared with responses given to the noun form of each stimulus to determine which form best outlines the affective and other psychological meaning characteristic of the work environment.

Method

Data was collected using the material and procedures described in Chapter III. Data analyses appropriate to test the hypothesis concerning the format of the stimuli and to determine the

efficiency of adjective stimuli to elicit associative responses that name aspects of the work environment are reported below along with the results of those analyses.

Results

Affective Level of Responses

To determine which format elicited responses with the highest level of affective content, the following analyses were completed. Subjects' responses were pooled across occupations for the 10 subjects, and a random sample of 14 sentence-stems (and their respective responses) were selected along with the 14 single-word equivalents (and their respective responses). Fourteen judges then rated each of the pooled responses in the context of the appropriate stimulus word or sentence-stem. Ratings were made on a nine-interval, "extremely unfavorable" to "extremely favorable," scale. Each judge then received an average score for his rating of all responses given to all sentence-stems. Identical interrater reliability scores (each score adjusted for mean differences) of .93 were obtained for judges on both the single-word and the sentence-stem formats.

A mean deviation score (using the fifth interval of the nine interval scale as a neutral point) was also computed for each judge's ratings and a repeated-measures analysis of variance was performed. The results were marginally significant ($p < .06$) and a subsequent t-test for related-measures was significant ($p < .05$). It was tentatively concluded that a sentence-stem format could be expected to elicit responses judged higher in affective content when compared to responses given to single-word stimuli.

Adjective Stimuli

As indicated in Chapter III, the assumption that instructions to subjects would establish a work-related set were supported. In Experiment I, more than 50% of the stimulus words elicited the responses "work" or "job." Therefore, it was deemed appropriate to examine the hypothesis that stimuli in the adjective form would elicit a significant proportion of responses in the noun form, which would represent aspects of the work environment. If true, this in turn would facilitate an affect-environmental object match between stimulus word and associative response that would be meaningful, especially when the subjects sampled were representative of workers in a particular occupation. The following analyses were completed.

First, the pooled responses given by subjects to the 16 adjectives in the single-word format were compared to the pooled responses given to 16 randomly selected noun stimuli from the remaining 84 stimuli in the single-word format. Two judges determined (with 100% agreement required) the proportion of responses that represented aspects of the work environment. Judges were told to view the stimulus words within each of the seven work categories as representative examples of aspects of the work environment and to judge the subjects' responses in that context. The percentage of work-related responses averaged 12% for the 16 adjective stimuli and 35% for the 16 noun stimuli. A test for difference between two proportions indicated that a significantly higher proportion of work-related responses were given to the noun stimuli ($p. < .01$).

The responses to the stimulus word "good" that were judged to be work-related are presented below. Almost all responses to "good" could be classified as generally desirable aspects of any work

RESPONSE DISTRIBUTION
FOR STIMULUS WORD "GOOD"

Good	f
work	4
job	3
pay	2
tool	2
ability	2
training	2
lighting	2
benefit	1
security	1
promotion	1
rating	1
boss	1
ring	1
raise	1
task	1
knowledge	1
effective	1
efficient	1

environment and it was difficult to infer the attitude of the subjects sampled toward aspects of their work environment. Also, the psychological meaning inherent in the distribution was very narrow and a function of the stimulus word itself. The adjective stimulus had served simply to classify appropriate aspects of the environment under the category "good." Therefore, while an affect-environmental match may be possible, the range of affective psychological meaning that could be assigned to the associative responses representing aspects of the work environment was limited to the affective dimensions found in adjectives, adverbs, and, perhaps, worker attributes.

Osgood (1969) indicated that there are probably only three (evaluation, potency and activity) affective dimensions of meaning within adjectives, adverbs and other words which serve to modify and describe stimulus objects. Futhermore, Osgood, Suci and Tannenbaum (1957) have shown that the semantic differential technique is a well-established and more rigorous technique than has been developed in the present study for using modifiers to index affective dimensions of meaning. Finally, the responses "work" and "job," as described in Chapter III, are considered ambiguous, especially so in the present format.

The adjective form of the stimuli elicited significantly fewer work-related responses, functioned to sharply restrict the word association paradigm to an investigation of the affective dimensions of

meanings (an endeavor best accomplished by the semantic differential technique), and, in the present context, elicited work-related responses that were artifacts of the response set.

Summary

Briefly, the sentence-stem format was found to elicit responses judged higher in affect when compared to the single-word format. Also, the noun form of the stimuli was judged to be more appropriate for the investigation of psychological meaning than the adjective form.

APPENDIX B

B-1 Experiment II: Word Association Data Collection Instrument, Stimulus Phrase Format

B-2 Experiment II: Response Distributions Pooled by Stimulus Phrase and Frequency

B-3 Experiment II: Automotive Mechanics' Response Distribution, by Stimulus Phrase and Frequency

B-4 Experiment II: Computer Data Processors' Response Distribution, by Stimulus Phrase and Frequency

B-5 Experiment II: Secretaries' Response Distribution, by Stimulus Phrase and Frequency

APPENDIX B-1

Experiment II: Word Association Data Collection Instrument, Stimulus Phrase Format

INSTRUCTIONS FOR USE BY ADMINISTRATORS

Pass out the response booklets and pencils.

Hello, my name is [ ], and I am from The Center for Vocational Education at The Ohio State University. In case you don't know, it is a group of educational researchers. One of our major functions is the development and refinment of vocational and technical training programs. You will be participating today in part of one of our research programs.

One of the vocational programs we are concerned with is the training of [ ]. This is why we have asked you especially to help us.

The first thing we would like you to do is to fill out the Background Information sheets that are attached to the booklets in front of you. We are only interested in group results, not those of any individual. Be assured that all the information requested will be held in confidence and that your name will not be used in any way.

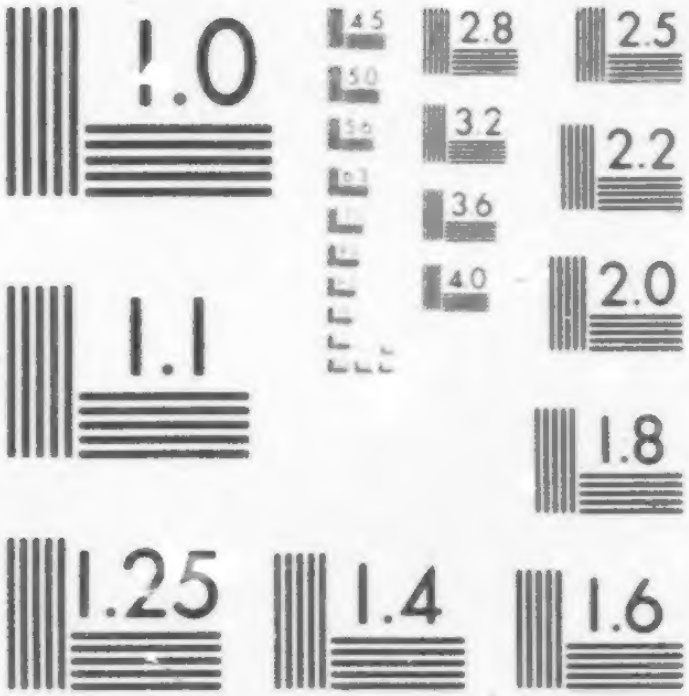
Background Information sheets filled out.

Is anyone still filling out a Background Information sheet? Your booklets contain several different tasks. Now I'll read the general instructions that you are to follow in completing the first task. Feel free to stop me any time you have a question.

The following pages contain 40 different concepts that are designed to find out what work means to people, and how they think and feel about their work. This questionnaire is intended to identify the many ways people think about work. It does not evaluate your performance as an employee. The results will be used at the OSU Center for Vocational Education for research purpose only. Therefore, we hope that you will do your very best to provide the information we need. For each concept you are asked to write down as many other words as you can think of in a short period of time.

On each page a key concept representing an idea relating to work is printed 15 times. Open your booklets to about Pages 5 or 6, and you can see how this looks. Each repetition is followed by a blank space. You are to write in the blank spaces as many different words that the key concept makes you think of. Each response should consist of only one word. Be sure to think back to the key concept after each word that you write because the point is to see how many and what other words the key concept makes you think of.

You will have 35 seconds to write as many words as you can think of which are related to the key concept on each page. When a recorded tone sounds, begin writing responses to the key words



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

on the first page. Each time the tone sounds turn the page and begin writing words to the key word on the next page. Do not turn the page until the tone sounds. You will follow this procedure for 25 minutes and then there will be a stop for a short rest. Write as fast and as clearly as you can, but not be too concerned about the proper spelling of the words. There are not right or wrong answers. You will have a chance to practice on a few words before we begin.

If you will now turn to the first page of your booklet, you can see a completed example of the type of words you will encounter. It shows you the procedure you should follow. The concept is "job knowledge," and it is repeated 15 times on a single page.

You can see that in the spaces provided, someone has written different words that came to their mind as they looked at the key concept. All of their responses are different and they are single words. Therefore, they are appropriate responses.

Please note the richness of meaning that this person has given the concept "job knowledge." They indicated that it is related to experience, skill and ability, that it is necessary; that it involves training, that it is helpful and related to performance. Some of these responses describe the key concept. Some may indicate the job action implied by the key concept. And some responses indicate feelings in relation to the concept.

Note that, at the bottom of the page, it says that it is not necessary for you to fill in all 15 blanks or to try to write as many different kinds of responses for each concept as you see in the example. However, you should try to write all of the responses that will best tell what the key concept means to you in relation to your work situation.

Are there any questions? Before we start, I would like to remind you to think back to the key concept after each word you write, because the point is to see <u>how many and what other kinds of words</u> the key concept makes you think of.

WORD ASSOCIATION

RESPONSE BOOKLET

The Center for Vocational Education
The Ohio State University
1960 Kenny Road
Columbus, Ohio 43210

BACKGROUND INFORMATION

NAME _____ CODE _____

CHECK YOUR AGE (IN YEARS):

Less than 21	21-25	26-30	31-35	36-40	41-45	46 or more
( )	( )	( )	( )	( )	( )	( )

CHECK YOUR PRESENT JOB TITLE:

Receptionist ( ) Stenographer ( ) Legal Secretary ( )

Typist ( ) General Secretary ( ) Medical Secretary ( )

Executive Secretary ( ) Administrative Assistant ( )

Other (please specify): _____

HOW MANY YEARS HAVE YOU WORKED FULL-TIME AT YOUR PRESENT JOB? _____

HOW MANY TOTAL YEARS HAVE YOU BEEN EMPLOYED FULL-TIME IN THIS OCCUPATION? _____

EDUCATION:

1. High School: Graduated from high school (or equivalent): Yes _____ No _____

2. Vocational training (check one response for each type of training):

	Years of Attendance						
	None	Less Than 1	1	2	3	4	5 or More
a. Vocational-technical in high school	___	___	___	___	___	___	___
b. Vocational-technical post-high school	___	___	___	___	___	___	___
c. Junior or community college	___	___	___	___	___	___	___
d. Four-year college or university	___	___	___	___	___	___	___
e. Military technical training school	___	___	___	___	___	___	___
f. Business school or business college	___	___	___	___	___	___	___
g. Formal company training program	___	___	___	___	___	___	___
h. Formal trade apprenticeship program	___	___	___	___	___	___	___
i. On the job experience	___	___	___	___	___	___	___
j. Other (specify) _____	___	___	___	___	___	___	___

3. After marking all of the above in question 2, also please circle one of the letters below indicating the one training situation where you learned most of your job skills (other than on the job experience).

a b c d e f g h i j

Thank you for your cooperation in completing this questionnaire.

BACKGROUND INFORMATION

NAME _____ CODE _____

CHECK YOUR AGE (IN YEARS): Less than 21 ( ) 21-25 ( ) 26-30 ( ) 31-35 ( ) 36-40 ( ) 41-45 ( ) 46 or more ( )

CHECK YOUR PRESENT JOB TITLE:

Data Converting Operator ( ) Programmer ( ) Systems & Procedures Analyst ( )

Computer Console Operator ( ) Lead Programmer ( ) Systems Programmer ( )

Junior Programmer ( ) Senior Programmer ( )

Other (please specify): _____

HOW MANY YEARS HAVE YOU WORKED FULL-TIME AT YOUR PRESENT JOB? _____

HOW MANY TOTAL YEARS HAVE YOU BEEN EMPLOYED FULL-TIME IN THIS OCCUPATION? _____

EDUCATION:

1. High School: Graduated from high school (or equivalent): Yes _____ No _____

2. Vocational training (check one response for each type of training):

	Years of Attendance						
	None	Less Than 1	1	2	3	4	5 or More
a. Vocational-technical in high school	___	___	___	___	___	___	___
b. Vocational-technical post-high school	___	___	___	___	___	___	___
c. Junior or community college	___	___	___	___	___	___	___
d. Four-year college or university	___	___	___	___	___	___	___
e. Military technical training school	___	___	___	___	___	___	___
f. Business school or business college	___	___	___	___	___	___	___
g. Formal company training program	___	___	___	___	___	___	___
h. Formal trade apprenticeship program	___	___	___	___	___	___	___
i. On the job experience	___	___	___	___	___	___	___
j. Other (specify) _____	___	___	___	___	___	___	___

3. After marking all of the above in question 2, also please circle one of the letters below indicating the one training situation where you learned most of your job skills (other than on the job experience).

a b c d e f g h i j

Thank you for your cooperation in completing this questionnaire.

BACKGROUND INFORMATION

NAME _____ CODE _____

CHECK YOUR AGE (IN YEARS):

Less than 21	21-25	26-30	31-35	36-40	41-45	46 or more
( )	( )	( )	( )	( )	( )	( )

CHECK YOUR PRESENT JOB TITLE:

Automotive Mechanic Apprentice ( )
Automotive Mechanic ( )
Service Advisor or Writer ( )
Job Specialist ( )

Other (please specify): _____

HOW MANY YEARS HAVE YOU WORKED FULL-TIME AT YOUR PRESENT JOB? _____

HOW MANY TOTAL YEARS HAVE YOU BEEN EMPLOYED FULL-TIME IN THIS OCCUPATION? _____

EDUCATION:

1. High School: Graduated from high school (or equivalent): Yes _____ No _____

2. Vocational training (check one response for each type of training):

	Years of Attendance						
	None	Less Than 1	1	2	3	4	5 or More
a. Vocational-technical in high school	___	___	___	___	___	___	___
b. Vocational-technical post-high school	___	___	___	___	___	___	___
c. Junior or community college	___	___	___	___	___	___	___
d. Four-year college or university	___	___	___	___	___	___	___
e. Military technical training school	___	___	___	___	___	___	___
f. Business school or business college	___	___	___	___	___	___	___
g. Formal company training program	___	___	___	___	___	___	___
h. Formal trade apprenticeship program	___	___	___	___	___	___	___
i. On the job experience	___	___	___	___	___	___	___
j. Other (specify) _____	___	___	___	___	___	___	___

3. After marking all of the above in question 2, also please circle one of the letters below indicating the one training situation where you learned most of your job skills (other than on the job experience).

a b c d e f g h i j

Thank you for your cooperation in completing this questionnaire.

DIRECTIONS

In the spaces provided someone has written different words that came to their mind as they looked at the key concept. All of their responses are different; they are single words, and they were presumably thinking about their work as they wrote. Therefore, they are appropriate responses.

job knowledge experience

job knowledge skill

job knowledge ability

job knowledge necessary

job knowledge training

job knowledge helpful

job knowledge performance

job knowledge

job knowledge

job knowledge

job knowledge

job knowledge

job knowledge

job knowledge

job knowledge

It is not necessary for you to fill in all 15 blanks or to try to write as many different kinds of responses for each key concept as the person did to "job knowledge." However, you should try to write all those responses that will best tell what the key concept means to you in relation to your work situation.

SAMPLE SHEET

my job _____

my job _____

my job _____

my job _____

my job _____

my job _____

my job _____

my job _____

my job _____

my job _____

my job _____

my job _____

my job _____

my job _____

my job _____

my job _____

APPENDIX B-2A

Experiment II: Response Distributions Pooled by Stimulus Phrase and Frequency

my opportunities for on-the-job training	
on-job-training	FREQ
excellent	2.
many	2.
very good	2.
variety	2.
freedom	1.
important for promotion	1.
limited	1.
necessary	1.
available	1.
schooling	1.
openings	1.
fair	1.
develops skills	1.
capitalize	1.
increasing	1.
good	1.
plenty	1.
expected	1.
appreciated	1.
encouraged	1.
relied on too much	1.
important for learning	1.
non-related	1.
endless	1.
significant	1.
education	1.
search	1.
constant	1.
desired	1.
required	1.
no time	1.
trainees	1.
important for skill	1.
self	1.
wide	1.
the economy	1.
interaction	1.
never ending	1.
experience	1.
helpful	1.
demand	1.
inquire	1.
other jobs	1.
opportunity	1.

me at work	
me at work	FREQ
happy	3.
efficient	3.
busy	2.
learning	2.
helpful	2.
friendly	2.
fast	1.
normal	1.
here	1.
quick tempered	1.
fluctuate	1.
active	1.
very happy	1.
conscientous	1.
boredom	1.
somewhat out of di	1.
develop skills	1.
comfortable	1.
determination	1.
who am I	1.
creative	1.
routine	1.
capable	1.
hyper	1
content	1.
accurate	1.
constructive	1.
interested	1.
ingenious	1.
clothes	1.
dependability	1.
reliable	1.
responsibility	1.
why am I here	1.
correct	1.
industrious	1.
like	1.
knowledge	1.
regularly	1.
unchallenged	1.
important	1.
speed	1.
productive	1.
loyal	1.
practical	1.
unappreciated	1.
improve department	1.
skill	1.
mundane	1.
knowledgeable	1.
useful	1.
waste time	1.
lack of respect	1.
goals of department	1.
neat	1.
developing philosophy	1.
experience	1.
gregarious	1.

the union on my job	
union on my job	FREQ
none	5.
non-existent	3.
unneeded	2.
unnecessary	2.
employees	1.
is none	1.
questionable	1.
not applicable	1.
close	1.
not relevant	1.
teamwork	1.
not effected	1.
morale	1.
not good	1.
dynasty	1.
not needed	1.
understanding	1.
none and I am glad	1.
unwanted	1.
benefits	1.
needed	1.
less time	1.
negative	1.
kinderance	1.
not wanted	1.
helpful	1.
pay	1.
unprotected	1.
unreasonable	1.
not considered	1.
would do no good	1.

my working conditions	
working conditions	FREQ
good	4.
important	4.
excellent	3.
clean	2.
fair	2.
improving	2.
relaxed	2.
pressure	1.
pleasant	1.
busy	1.
superior	1.
generally good	1.
important for output	1.
musicless	1.
efficiency	1.
self-responsibility	1.
normal	1.
pleasant	1.
sometimes noisy	1.
motivating	1.
expensive	1.
enjoyable	1.
sometimes chaotic	1.
roomy	1.
necessary	1.
morale	1.
not supervised	1.
benefits	1.
rigorous	1.
sometimes distract	1.
crowded	1.
no pressure	1.
people relationship	1.
job accuracy	1.
contribute	1.
poor	1.
flexible	1.
could be better	1.
desire	1.
affect	1.

my overtime work	
my overtime work	FREQ
necessary	6.
important	2.

my overtime work (continued)	
unnecessary	2.
no pay	2.
my own decision	1.
infrequent	1.
part of my job	1.
light	1.
enjoyable	1.
very little	1.
bad	1.
heavy hours	1.
self-controlled	1.
rewarded	1.
choice	1.
not much	1.
some	1.
money	1.
limited	1.
finish job	1.
reasonable	1.
voluntary	1.
benefit	1.
not compensated	1.
long fast hours	1.
not expected	1.
strenuous	1.
sometimes necessary	1.
odd hours	1.
finish on time	1.
voluntary	1.
must complete job	1.
frustrating	1.
never mandatory	1.
unpaid	1.
get the job done	1.
worthwhile	1.
excessive	1.
not paid	1.
long hours	1.
deadlines	1.
sporadic	1.
dictated by deadlines	1.
accomplishment	1.
self motivated	1.
scheduling	1.
work load	1.
frequent	1.
time off	1.
understaffed	1.
weekends	1.

my control over work methods	
control of methods	FREQ
fair	2.
very little	1.
considerable	1.
good	1.
large	1.
necessary	1.
little	1.
choosing my own	1.
unaccountable	1.
full control	1.
experience	1.
very good	1.
adequate usually	1.
myself	1.
unstable	1.
do fastest way	1.
limited	1.
better job done	1.
reasonable	1.
insufficient	1.
better than average	1.
quick	1.
motivating	1.
more	1.
some standards	1.
knowledge	1.
try	1.
varied	1.
supervisor	1.
training	1.
satisfactory	1.
routine	1.
instructional	1.
listen	1.
no set rules	1.
cost	1.
undecided	1.
less than needed	1.
opportunity	1.
judgment	1.
time	1.
no standards	1.
inadequate	1.

my job	
my job	FREQ
fun	2.
accuracy	2.
satisfying	2.
adequate	2.
boring	2.
exciting	2.
helpful	2.
future	2.
training	2.
advancement	1.
creative	1.
manager of operations	1.
rigorous	1.
fair	1.
steady	1.
detail	1.
vacation	1.
excellent	1.
programmer	1.
super	1.
my choice	1.
good	1.
necessary	1.
fair play	1.
lucrative	1.
operating	1.
easy	1.
concentration	1.
systems	1.
prestigous	1.
self-satisfying	1.
challenge	1.
bad	1.
money	1.
time	1.
repitition	1.
morale low	1.
status	1.
supervising	1.
needed	1.
quick thinking	1.
concepts	1.
stable	1.
enjoyment	1.
secure	1.
vice president	1.
opportunity	1.
sometimes challenging	1.
gaining experience	1.
relaxing	1.
responsibility	1.
power	1.
all shifts	1.
demanding	1.
parameters	1.
flexible	1.
good pay	1.
knowledge	1.
supervisor	1.
enjoyable	1.
dependability	1.
fulfilling	1.
directive	1.
seven days a week	1.
open-ended	1.
change	1.
not tied down	1.
general	1.
chaotic	1.
flow	1.
rewarding	1.
unstable	1.
varies	1.

my fringe benefits	
my fringe benefits	FREQ
helpful	5.
insurance	2.
good	2.
adequate	2.
retirement	2.
many	2.
walk	2.
none	1.
is none	1.
reasonable	1.
expected	1.
hours	1.

my fringe benefits (continued)	
excellent	1.
superior	1.
hospitalization	1.
pay for	1.
OK	1.
makes working pleasure	1.
athletic	1.
family	1.
not inspiring	1.
needed	1.
normal	1.
useful	1.
inadequate	1.
coworkers	1.
family	1.
vacation	1.
above average	1.
tennis	1.
little concern	1.
hopeful when down	1.
future	1.
important	1.
not rewarding	1.
free	1.
new	1.
education	1.
self-security	1.
sick leave	1.
great	1.
minimum supervised	1.
relax	1.
ambiguous	1.
lenience	1.
security	1.
sufficient	1.
drawback	1.
deserving	1.
competitive	1.
enjoyability	1.
variable	1.
satisfied	1.
appreciated	1.
fair	1.
could be better	1.

work pace used on my job	
work pace used	FREQ
fast	4.
varies	3.
quick	2.
speed	2.
steady	2.
pressure	2.
hectic	2.
happy medium	1.
reasonable	1.
self-controlled	1.
determined by task	1.
independent	1.
slow	1.
affects production	1.
leisure	1.
self established	1.
too fast	1.
rapid	1.
self-regulatory	1.
must be followed	1.
self-control	1.
hard	1.
quick-paced	1.
accurate	1.
quality	1.
self-adjusting	1.
no reward	1.
emergency	1.
sporadic	1.
nothing	1.
confusing	1.
reliable	1.
important	1.
work determined	1.
fast	1.
timely	1.
late	1.
uncontrolled	1.
accuracy	1.
crash program	1.
fast pace	1.
experienced	1.
fatigue	1.
easy	1.
routine	1.
jobs	1.
not pushed	1.
deadlines to meet	1.
I set my own pace	1.

work methods used on my job	
work methods used	FREQ
organization	2.
good	2.
supervision	2.
poor	1.
not innovative	1.
mostly routine	1.
OK	1.
modern	1.
own	1.
constant change	1.
varied	1.
mental	1.
training	1.
self-chosen	1.
vary	1.
ill-defined	1.
necessary	1.
definition	1.
helpless	1.
not progressive	1.
normal	1.
over-protected	1.
efficient	1.
adjust	1.
new ideas	1.
technical	1.
explanations	1.
disciplined	1.
appropriate	1.
no standards	1.
individual	1.
good use of tools	1.
conservative	1.
clean efficient	1.
self regulatory	1.
important	1.
new methods	1.
skill	1.
physical	1.
guidance	1.
easy	1.
pushing	1.
good use of time	1.
application orient	1.
logic	1.
finish the job	1.
tactics	1.
undefined	1.

my coffeebreaks	
my coffeebreaks	FREQ
relaxing	3.
short	2.
necessary	2.
helpful	2.
useful	2.
no time	1.
average	1.
very few	1.
peaceful	1.
self scheduled	1.
required	1.
flexible	1.
frequent	1.
good communication	1.
at will	1.
too many	1.
anytime	1.
take breaths	1.
many	1.
waste	1.
unrelated to job	1.
too busy	1.
as many as I want	1.
lucky to get one	1.
fair	1.
enjoy	1.
not necessary	1.
benefit	1.
relaxation	1.
few	1.
relaxation	1.
boredom	1.
not much used	1.
breaks monotony	1.
long	1.
critical	1.
if time permits	1.
two	1.
self-defined	1.
more energy	1.
opportunity	1.
breaks up the day	1.
relaxed	1.
improves ability	1.
fun	1.
no restrictions	1.
not well defined	1.

my coffeebreaks (continued)	
day goes faster	1.
satisfying	1.
pattern	1.
fatigue	1.
vary	1.
enough	1.
solitary	1.
enjoyable	1.
good to get away	1.
re-charge	1.
needed	1.
productive	1.
unhampered	1.
unsupervised	1.

interference with my job	
interference-job	FREQ
none	2.
personal problems	2.
minimum	2.
programmers	1.
phone	1.
normal interruption	1.
little	1.
outside problems	1.
reasonable	1.
aggrevating	1.
family	1.
very little	1.
seldom	1.
intolerable	1.
sometimes	1.
lose speed	1.
athletics	1.
frustration	1.
pressure	1.
questions from others	1.
coworkers	1.
expected	1.
slows work	1.
infrequent	1.
schedule	1.
bad	1.
supervisor	1.
managers	1.
lose place	1.
personalities	1.
angry	1.
no communication	1.
questions for others	1.
causes extra work	1.
upsetting	1.
imcompetence	1.
lose time	1.
beneficial	1.
low morale	1.
noise in office	1.
unnecessary	1.
lack of facilities	1.
lack of privacy	1.

my pay	
my pay	FREQ
adequate	6.
fair	3.
inadequate	3.
ample	2.
necessary	2.
not enough	1.
good	1.
well deserved	1.
job valuation	1.
so-so	1.
nice	1.
basic	1.
training	1.
sufficient	1.
provides incentive	1.
work too hard	1.
above average	1.
tertiary	1.
average	1.
deserved	1.
acceptable	1.
comparable	1.
could be better	1.
essential	1.
equal to performance	1.
independent	1.
steady	1.
financial reward	1.
earned	1.
not fairly evaluated	1.
product of work	1.
security	1.
job more important	1.
not all important	1.
required	1.
limited by budget	1.
important	1.
should be better	1.

my opportunities to do a variety of tasks	
variety of tasks	FREQ
good	4.
excellent	3.
many	2.
limited	2.
boring	2.
knowledge	2.
fair	1.
potential	1.
often	1.
plentiful	1.
accuracy	1.
customers	1.
not really	1.
break monotony	1.
interest	1.
self-defined	1.
frequent	1.
inexperience	1.
makes me think	1.
benefits	1.
at ones ability	1.
responsibility	1.
supervision	1.
self-satisfying	1.
college degree	1.
helps	1.
helps day go faster	1.
helpful	1.
unlimited	1.
interesting	1.
fun	1.
satisfying	1.
exist	1.
stimulating	1.
necessary	1.
training	1.
research	1.
required	1.
interest generating	1.
easy	1.
instructional	1.
enjoy	1.
desire	1.
design	1.
provide experience	1.
attention	1.

freedom to use my own judgment at work	
freedom-judgment	FREQ
good	3.
necessary	3.
adequate	2.
satisfying	2.
important	2.
encouraged	2.
helpful	2.
very little	1.
unlimited	1.
fair	1.
much	1.
conflict	1.
freedom of express	1.
completely	1.
to an extent	1.
customers	1.
yes	1.
good and bad	1.
proves responsible	1.
results	1.
insufficient	1.
always	1.

freedom to use my own judgment at work (continued)

truthful	1.
available	1.
makes work easier	1.
good of company	1.
jobs	1.
daily	1.
enjoyable	1.
underestimated	1.
job quality	1.
interference	1.
normal	1.
instructional	1.
good of employee	1.
money	1.
responsibility	1.
used	1.
rewarding	1.
time finished	1.
too rewarding	1.
beneficial	1.
required	1.
people	1.
managers	1.
learning	1.
always	1.
increased	1.

my fellow workers

my fellow workers	FREQ
friendly	5.
helpful	4.
OK	3.
knowledgeable	3.
good	2.
intelligent	2.
enjoyable	2.
understanding	2.
considerate	2.
accurate	2.
unconcerned	1.
cooperative	1.
are nice	1.
good natured	1.
friends	1.
loyal	1.
a-OK	1.
fine	1.
teamwork	1.
varied	1.
low morale	1.
normal	1.
fair	1.
strictly business	1.
people	1.
productive	1.
young	1.
experienced	1.
some problems	1.
helping	1.
liked	1.
helpfulness	1.
idle	1.
good group	1.
many	1.
normal	1.
sources of information	1.
cooperative	1.
efficient	1.
fun-luving	1.
theoretical	1.
competent	1.
aggravating at times	1.
fear	1.
fun	1.
zero	1.
hard-working	1.
variable experience	1.
same age	1.
hard workers	1.
lazy workers	1.
semi-involved	1.
inexperienced	1.
cross section	1.

my working hours

my working hours	FREQ
flexible	4.
long	3.
good	3.
busy	3
satisfying	2.
enjoyable	2.
too long	1.
irregular	1.
average	1.
standard	1.
enjoy	1.
excellent	1.
acceptable	1.
not set time	1.
varies	1.
good for production	1.
vary	1.
satisfied	1.
inflexible	1.
bad	1.
boring-sometimes	1.
convenient	1.
depends	1.
average	1.
worth while	1.
challenge	1.
somewhat flexible	1.
end when job done	1.
decide myself	1.
constant	1.
lengthly	1.
my choice	1.
not routine	1.
fair	1.
judgment	1.
asset	1.
gratifying	1.
somewhat flexible	1.
not strict	1.
I determine somewhat	1.
reasonable	1.
can't plan ahead	1.
self-determined	1.
used fully	1.
job benefit	1.
variable	1.
full	1.
tiring	1.
keys	1.
fixed	1.
available	1.

feeling of accomplishment at work

accomplishment-work	FREQ
good	3.
high	2.
necessary	2.
pride	2.
varies	1.
considerable	1.
very good	1.
great	1.
satisfaction	1.
quality	1.
getting better	1.
job well done	1.
varying	1.
enjoyable	1.
good for myself	1.
essential for output	1.
occasionally	1.
normal	1.
correct	1.
frequent	1.
mundane	1.
satisfying	1.
well done	1.
self-gratification	1.
quantity	1.
proper background	1.
required	1.
recognition	1.
not noted	1.
peace of mind	1.
elation	1.
reliable	1.
motivating	1.
routine	1.
service	1.
improvements	1.

feeling of accomplishment at work (continued)	
adequate	1.
sharing	1.
by supervisor	1.
happiness	1.
excellent	1.
accurate	1.
relative	1.
noted by coworkers	1.
patience	1.
self-eva uation	1.

interaction with my coworkers	
interaction-coworkers	FREQ
necessary	4.
good	3.
frequent	2.
infrequent	1.
helpful	2.
relaxing	2.
enjoy	2.
poor communication	1.
friends	1.
lots of interaction	1.
high	1.
easy	1.
excellent	1.
generally good	1.
active	1.
good and bad	1.
important	1.
impertinent	1.
low morale	1.
informal	1.
normal	1.
fun	1.
pleasant	1.
expansion	1.
easy to get along	1.
enjoyable	1.
respect	1.
understanding	1.
grants	1.
needs improvement	1.
good relationship	1.
often	1.
happiness	1.
honest	1.
social	1.
informative	1.
learn	1.
no problems	1.
cooperative	1.
more productive	1.
loyal	1.
communicative	1.
adequate	1.
friendly	1.
some friction	1.
understanding	1.
cordial	1.
more knowledge	1.
cooperation	1.
takes time	1.
limits	1.
refreshing	1.
desirable	1.

opportunities to help others in the community	
help others - community	FREQ
many	3.
limited	2.
charities	1.
none	1.
very goo	1.
fair	1.
extra work	1.
great	1.
indirectly	1.
guidance	1.
good	1.
no time	1.
some	1.
withdraw	1.
enriched life	1.
isolated	1.
normal	1.
frequent	1.
obligated	1.
minor part of job	1.
experience	1.
job contact only	1.
useful	1.
concern	1.
necessary	1.
vocational	1.
individual	1.
alienated	1.
rewarding	1.
charity	1.
satisfying	1.
enjoy	1.
willing	1.
available	1.
not relative	1.
growth	1.
ability	1.
not helpful	1.
understanding	1.
superfluous	1.

prestige on my job in the community	
prestige-community	FREQ
high	4.
excellent	2.
sufficient	1.
very good	1.
fair	1.
feel important	1.
over-emphasized	1.
good I guess	1.
respect	1.
damn good	1.
not discussed	1.
regarded as good	1.
adequate	1.
security	1.
unimportant	1.
easy	1.
satisfying	1.
low-profile	
not important-me	1.
unique	1.
rewarding	1.
low	1.
misunderstood	1.
varied	1.
happiness	1.
understanding	1.
respect d	1.
over-emphasized	1.
not important	1.
peace of mind	1.
assistance	1.
accomplishment	1.

opportunities for self-fulfillment	
self-fulfillment	FREQ
unlimited	2.
varies	2.
many	2.
necessary	2.
open	2.
poor	1.
good	1.
loads	1.
average	1.
open ended	1.
minimum	1.
depend on me	1.
excellent	1.
freedom	1.
great	1.
important	1.
not taken	1.
limited	1.
adequate	1.
attitude	1.
low morale	1.
self-defined	1.
business	1.
primarily	1.
creativity	1.
ability	1.
job	1.
desire	1.

opportunities for self-fulfillment (continued)

broad	1.
experience	1.
responsibility	1.
not encouraged	1.
past	1.
professionalism	1.
crisis	1.
ego satisfaction	1.
performed	1.

my prestige at work

my presitge-work	FREQ
good	5.
adequate	2.
helpful	2.
poor	1.
excellent	1.
little	1.
fairly good	1.
respectful	1.
optimal	1.
fair	1.
not important	1.
little to none	1.
necessary	1.
future	1.
looked up to	1.
satisfying	1.
unnecessary	1.
part of the group	1.
equal	1.
hard work	1.
opinion not valued	1.
importance	1.
neurotic	1.
job quality	1.
leader	1.
normal	1.
accepted	1.
personality	1.
attention to appearance	1.
varied	1.
valued	1.
self-esteem	1.
teach	1.
not high-not low	1.
understanding	1.
required	1.
available	1.
listening	1.
unknown	1.

my job security

my job security	FREQ
good	5.
important	5.
excellent	2.
bad	1.
reasonable	1.
new work	1.
volatile	1.
very secure	1.
skill	1.
above average	1.
very good	1.
adequate	1.
essential	1.
unnecessary	1.
satisfying	1.
coddled	1.
is none	1.
necessary	1.
questionable	1.
safe	1.
unimportant	1.
efforts	1.
experience	1.
no worry	1.
fear	1.
training	1.
sufficient	1.
dead wood kept on	1.
required	1.
loyalty	1.
family	1.
same	1.
varies	1.
responsibility	1.
no firing	1.
personality	1.
ability	1.
state	1.

supervisor's evaluation of my work

supervisor's evaluation	FREQ
good	4.
fair	4.
important	2.
accurate	2.
excellent	1.
accepted	1.
infrequent	1.
very good	1.
outstanding	1.
good to excellent	1.
helpful	1.
underestimated	1.
important for future	1.
frank	1.
effects next job	1.
satisfied	1.
bright future	1.
normal	1.
frequent	1.
ego building	1.
self-evaluation	1.
unnecessary	1.
complete	1.
quite objective	1.
some disagreement	1.
I am not appreciated	1.
improves my accuracy	1.
meaningful	1.
communicate	1.
length of employment	1.
clear	1.
encouraging	1.
informative	1.
honest	1.
rewarded	1.
efficient	1.
picky	1.
errors	1.
appearance oriented	1.
accuracy	1.
agreement	1.
creative	1.
instructional	1.
understand	1.
fast	1.
personal	1.
cost savings	1.
necessary	1.
reliability	1.

my opportunities for promotion

opportunities-promotion	FREQ
none	2.
many	2.
accuracy	2.
good	1.
fair	1.
OK	1.
good	1.
knowledge of job	1.
validity	1.
wide open	1.
doubtful	1.
work	1.
excellent	1.
training	1.
few	1.
few to none	1.
hopeful	1.
interdepartmental	1.
reasonable	1.
sufficient	1.
good in past	1.
nill	1.
motivating	1.
performance	1.
honesty	1.
depend on me	1.
desire	1.
self-initiative	1.
responsible	1.
salary advance	1.
not defined	1.
small raises	1.
make my try harder	1.
restricted	1.
necessary	1.
no chance	1.
smallness	1.
motivation	1.
loyal	1.
time	1.
discouraging	1.
pay	1.

my opportunities for promotion (continued)

desired	1.
available	1.
at the top	1.
precision	1.
results	1.
advancement	1.
bad	1.
rules	1.

my self-confidence at work

my self-confidence	FREQ
good	6.
varies	2.
fair	2.
important	2.
necessary	2.
performance	2.
experience	2.
knowledge	2.
training	2.
high	1.
minimum	1.
average	1.
very high	1.
needs proding	1.
excellent	1.
needed	1.
could be better	1.
real	1.
beneficial	1.
ease	1.
required	1.
certain areas	1.
results of job	1.
in control	1.
scarce	1.
helpful	1.
job ability	1.
hard to come by	1.
happy medium	1.
strong-willing	1.
reinforcing	1.
greater	1.
respect	1.
others	1.
managers attitude	1.
essential	1.
varied	1.
secure	1.
self-defined	1.
normal	1.
responsible	1.
coworkers attitude	1.
growing	1.
self-produced	1.
not worked at	1.

my supervisor's ability to handle people

sup. handle people	FREQ
fair	3.
understanding	3.
poor	2.
adequate	2.
necessary	2.
good	2.
good/bad	1.
great	1.
needs building	1.
extremely	1.
excellent	1.
management	1.
very good	1.
extremely good	1.
help	1.
bad	1.
important	1.
unconcern	1.
see's only good	1.
smooth	1.
beneficial	1.
personnel	1.
honest	1.
non-offensive	1.
overly detailed	1.
problems	1.
poor management	1.
lenient	1.
training	1.
lax	1.
taken advantage of	1.
best	1.
activity	1.
compassionate	1.
objective	1.
uninformed	1.
professional	1.
natural ability	1.
compassion	1.
doesn't see bad	1.
more job	1.
friends	1.
airs	1.
helps some	1.
strong	1.
unknown	1.
doesn't others	1.

my competence at work

competence at work	FREQ
adequate	3.
experience	3.
good	2.
excellent	2.
high	2.
increasing	2.
confidence	2.
fair	1.
none	1.
questionable	1.
very good	1.
knowledge	1.
above average	1.
supervisor	1.
ego	1.
types of jobs	1.
fast	1.
could be improved	1.
average	1.
unfair	1.
helpful	1.
potential	1.
not questioned	1.
necessary	1.
skill	1.
organized	1.
background	1.
concern	1.
speed	1.
self-reliance	1.
pay	1.
efficient	1.
important	1.
recognized	1.
expansion	1.
demonstrated	1
self-training	1.
satisfaction	1.
accuracy	1.
importance of post	1.
knowledgeable	1.
depended upon	1.
rewarded	1.
used	1.
get work out	1.
application	1.
future	1.
initiative	1.
help others	1.
teamwork	1.
boredom	1.
growing	1.
prestige	1.
interest	1.
enthusiasm	1.

daydreaming at work

daydreaming-work	FREQ
very little	2.
necessary	2.
boredom	2.
no time	1.
never	1.
sometimes	1.
occasional	1.
sometimes easy	1.
frequently	1.
not interest-job	1.
sometimes useful	1.
impossible	1.
none	1.
scarce	1.
rare	1.
useful	1.
easy	1.
at times	1.
shouldn't be	1.
much when new	1.
not time	1.
little	1.
work is boring	1.
working for money	1.
accepted by management	1.
quantity of work	1.
almost non existant	1.
useless	1.

daydreaming at work (continued)	
escape	1.
infrequent	1.
lose time	1.
concentration	1.
varies with involvement	1.
too busy	1.
preoccupied	1.
explore	1.
not often	1.
interest of work	1.
varying	1.
sometimes needed	1.
less accuracy	1.
interest	1.
not productive	1.
required	1.
moral	1.
uncontrollable	1.
wasted motion	1.
enthusiasm	1.
imagination	1.
work load determine	1.
challenge	1.

my opportunities to do challenging work

challenging work	FREQ
frequent	2.
varied	2.
limited	2.
important	2.
rare	1.
average	1.
good	1.
few	1.
importance	1.
many	1.
minimal	1.
excellent	1.
much	1.
employer	1.
vary	1.
sometimes	1.
show ability	1.
available	1.
boredom	1.
must be dug out	1.
great	1.
like more	1.
responsibility	1.
self-interest	1.
depend on me	1.
accuracy	1.
interest	1.
satisfying	1.
fun	1.
on my own	1.
accepted	1.
attitude	1.
rut	1.
fine	1.
ability	1.
unbonded	1.
accepted	1.
attitude	1.
rut	1.
fine	1.
ability	1.
unbonded	1.
history	1.
managers response	1.
knowledge	1.
education	1.
groups	1.
unknown	1.
ingenuity	1.
provide experience	1.
environment	1.
adequate	1.
broadening	1.
business	1.
competition	1.

equipment used on my job

equipment used	FREQ
computer	5.
good	3.
modern	3.
fast	3.
adequate	2.
reliable	2.
paper	2.
interesting	2.
new	2.
essential	1.
pen	1.
necessary	1.
variable	1.
training	1.
irrelevant	1.
knowledge	1.
mind	1.
machine	1.
brains	1.
good shape	1.
eraser	1.
easy to use	1.
technical	1.
data recorder	1.
pencils	1.
disk	1.
limited	1.
skill	1.
fun	1.
pencil	1.
efficient	1.
coding sheets	1.
schedule	1.
tape	1.
sophisticated	1.
pencil and paper	1.
secretarial help	1.
complex	1.
very good	1.
books	1.
boring	1.
program	1.
keypunch	1.
telephone	1.
control	1.
reference works	1.
accessible	1.
super office	1.
mental skill	1.
challenging	1.
other people	1.
think	1.
easily used	1.
excellent	1.
mystery	1.
unit record equipment	1.
manuals	1.
people	1.
education opportunity	1.
clean	1.

moral "rightness" of my job

moral "rightness"	FREQ
questionable	2.
good	2.
honest	2.
no opinion	1.
inert	1.
normal	1.
fair	1.
inapplicable	1.
accepted	1.
not affected	1.
challenge	1.
ethical	1.
excellent	1.
importance	1.
very important	1.
personal attitude	1.
unknown	1.
no good no harm	1.
expectation	1.
not questioned	1.
not religious	1.
people	1.
right for me	1.
resppnsibility	1.
no human benefit	1.
no guilt	1.
satisfy	1.
mankind	1.
helping	1.
isolated	1.
help	1.
not wasted	1.

my supervisor

my supervisor	FREQ
fair	4.
OK	3.
friendly	3.
helpful	3.
good	2.
easy going	2.
understanding	2.
experienced	2.

my supervisor (continued)

knowledgeable	2.
good man	1.
best	1.
competent	1.
not applicable	1.
boss	1.
friend	1.
professional	1.
relationship	1.
uneasy	1.
intelligent	1.
good person	1.
constructive	1.
job distributor	1.
necessary	1.
diligent	1.
experience	1.
unknown	1.
efficient	1.
patient	1.
great	1.
understanding	1.
kind	1.
tennis	1.
poor manager	1.
important to have	1.
responsive	1.
background	1.
wisdom	1.
nice	1.
accessible	1.
compassionate	1.
sympathetic	1.
personal feelings	1.
mature	1.
considerate	1.
help	1.
dependable	1.
problems	1.
developer of good	1.
peace keeper	1.
guidance	1.

company policies on my job

company policies	FREQ
good	3.
fair	3.
flexible	2.
no complaints	1.
normal	1.
OK	1.
nonstringent	1.
excellent	1.
undetermined	1.
very good	1.
work	1.
superior	1.
not enforced	1.
strange	1.
essential to job	1.
lenient	1.
job results	1.
loose	1.
some irrelevant	1.
followed well	1.
not overly demanding	1.
vague	1.
advantageous	1.
busy	1.
pretty flexible	1.
parking bad	1.
relaxed	1.
ill-defined	1.
professional	1.
jobs completed	1.
stupid	1.
secure	1.
fair	1.
fine	1.
everchanging	1.
important	1.
non-harrassment	1.
problem	1.
family	1.
not many	1.
need revision	1.
necessary	1.
quality work	1.
firm	1.
bearable	1.
regular	1.
sometimes ill defined	1.
required	1.
mismanaged	1.
not well defined	1.
out of date	1.
length of stay	1.
defined	1.
some petty	1.
changing too slow	1.
could be better	1.
government work	1.

use of my abilities at work

use of abilities	FREQ
accuracy	2.
good	2.
responsibility	2.
necessary	2.
speed	2.
eighty percent	1.
peaks	1.
knowledge	1.
unhampered	1.
job completed-time	1.
minimum	1.
well used	1.
well-used	1.
saves time	1.
problems	1.
yes	1.
not fully used	1.
sometimes	1.
partial	1.
adequate	1.
ego	1.
sufficient	1.
could be better	1.
normal	1.
knowing	1.
job done well	1.
better	1.
added to	1.
expanding	1.
programs	1.
doesn't use all	1.
potential	1.
some unfulfillment	1.
production	1.
limited	1.
frustration	1.
not creative	1.
learning	1.
conflict	1.
saves cost	1.
poorly managed	1.
desire	1.
patience	1.
fair	1.
extensive	1.
average	1.
like	1.

recognition for my work

recognition-work	FREQ
normal	3.
adequate	3.
good	2.
ego	2.
promotion	2.
appreciative	2.
poor	1.
average	1.
common	1.
works	1.
small	1.
self-recognition	1.
salary	1.
unaware	1.
very important	1.
sometimes	1.
little	1.
managers attitude	1.
critical	1.
low morale	1.
silently recognize	1.
important	1.
satisfying	1.
not necessary	1.
helpful	1.
employee recognition	1.
self-satisfaction	1.
helpful for next job	1.
supervisor	1.
gotten worse	1.
often	1.
successfulness	1.
monetary	1.
no communication	1.
not demonstrative	1.

recognition for my work (continued)	
fast	1.
frequent	1.
pay check	1.
fulfilling	1.
gratifying	1.
title	1.
not really important	1.
fulfillment	1.
reliable	1.
freedom of methods	1.
rewarding	1.
respect	1.
no pay	1.
advancement	1.
necessary	1.
capable	1.
needed	1.
tasteful	1.
wanted	1.
confused issue	1.

handling of grievances on my job

handling-grievance	FREQ
understanding	3.
poor	2.
fair	2.
necessary	2.
normal	1.
angry	1.
fairly easy	1.
important to coworker	1.
not fast enough	1.
subtle	1.
no problem	1.
supervisor seldom	1.
excellent	1.
good supervisor	1.
poorly	1.
adequate	1.
communicate	1.
dissappointed	1.
nonfrequent	1.
lot of static	1.
avoid	1.
no action	1.
always worked out	1.
mismanaged	1.
moral	1.
challenge	1.
needed	1.
fun problems	1.
quick response	1.
lack of communication	1.
communication	1.
not many grievances	1.
unnecessary	1.
talk	1.
for company	1.
fairness	1.
some my fault	1.
supervisory	1.
insightful	1.
self-evaluation	1.
needs improvement	1.

my control over work pace

control over pace	FREQ
necessary	3.
complete	2.
good	2.
flexible	2.
very little	1.
potentially good	1.
normal	1.
time	1.
fair	1.
important	1
extensive	1.
full control	1.
positive	1.
excellent	1.
not good	1.
good but varies	1.
in practice not good	1.
knowledge	1.
significant	1.
adjust	1.
I set my pace	1.
time schedule	1.
adjustable	1.
too much work	1.
my choice	1.
adequate	1.
better job done	1.
frustration	1.
not learned how	1.
peaks	1.
amount	1.
helpful	1.
interaction	1.
governed by deadlines	1.
getting job done	1.
slow	1.
more accurate	1.
my fault	1.
smooth	1.
columns	1.
beneficiary	1.
screw-ups	1.
not important	1.
more responsibility	1.
others	1.

APPENDIX B-3

Experiment II: Automotive Mechanics' Response Distribution, by Stimulus Phrase and Frequency

my opportunities for on-the-job training

on-job-training	FREQ
good	7.
helpful	3.
necessary	3.
everyday	2.
needed	2.
not enough	2.
OK	2.
knowledge	2.
always	1.
none	1.
poor	1.
great	1.
excellent	1.
is good	1.
no	1.
short cuts	1.
cooperation	1.
fantastic	1.
par	1.
above average	1.
schools	1.
do the job faster	1.
ability	1.
experience	1.
many	1.
not bad	1.
varied	1.
wanted	1.
better ability	1.
service books	1.
do the work right	1.
a must	1.
responsibility	1.
skill	1.
experiencing	1.
coworkers	1.
notices	1.
the best way to learn	1.
work conditions	1.
best way to learn	1.
interesting	1.
supervision	1.

me at work

me at work	FREQ
good	3.
busy	3.
fast	3.
clean	3.
fair	2.
honest	2.
neat	2.
liked	1.
rushing	1.
no	1.
be on time	1.
every day	1.
steady	1.
normal	1.
happy	1.
quiet	1.
early	1.
I am good	1.
attitude	1.
alone	1.
promptness	1.
not good	1.
learn	1.
could be better	1.
dependable	1.
productive	1.
tired	1.
thorough	1.
here	1.
friends	1.
necessary	1.
independent	1.
meaningful	1.
efficient	1.
experience	1.
improving	1.
reliable	1.
fulfillment	1.
coffee	1.
performance that counts	1.
courteous	1.
learning	1.
dedicated	1.
helpful	1.
friendly	1.
earning	1.
willing	1.
cooperative	1.

the union on my job

union on my job	FREQ
none	14.
needed	2.
unnecessary	2.
company	1.
no	1.
good	1.
no union	1
not good	1.
no more	1.
close	1.
coming soon	1.
no thanks	1.
can't get one	1.
not wanted	1.
togetherness	1.
I don't like	1.
helpful	1.
too much money	1.
hassle	1.
friendship	1.
benefits	1.
trouble	1.
money	1.
no work	1.
impossible	1.

my working conditions

working conditions	FREQ
good	7.
fair	4.
could be better	3.
safe	2.
clean	2.
dirty	2.
OK	2.
space	2.
best	1.
some are good	1.
are good	1.
important	1.
grease	1.
average	1.
bad	1.
heat	1.
manual	1.
helpful	1.
duty	1.
poor	1.
unity	1.
room	1.
parts department	1.
improving	1.
comfortable	1.
good management	1.
cleaner	1.
tools	1.
unusual	1.
modern	1.
organized	1.
coworkers	1.
better	1.
entrance	1.
secure	1.
good benefits	1.
neater	1.
necessary	1.
crowded	1.
morale	1.
time	1.
experience	1.
understanding people	1.
oily	1.
schooling	1.
greasy	1.

my overtime work

my overtime work	FREQ
none	6.
necessary	2.
money	2.
helpful	2.
more money	2.
dislike	1.
we have no overtime	1.
plentiful	1.
no pay	1.
fair	1.
helpful to check	1.
a lot	1.
unnecessary	1.
average	1.
when needed	1.
not compensated	1.
productive	1.
tired	1.
rewarding	1.
profitable	1.
commission	1.
not much	1.
great amount	1.
experience	1.

my overtime work (continued)	
flatrate	1.
helps	1.
no time	1.
not appreciated	1.
occasionally	1.
home	1.
not on weekends	1.
tiring	1.

my control over work methods	
control of methods	FREQ
none	4.
helpful	4.
yes	2.
good	2.
safety	2.
necessary	2.
good judgment	1.
my	1.
none	1.
sensible	1.
limited	1.
speed	1.
coordination	1.
average	1.
bad	1.
complete	1.
several	1.
right	1.
accurate	1.
could be better	1.
service	1.
service writers	1.
needs OK	1.
suggestive	1.
fast	1.
OK	1.
parts	1.
entrance	1.
neat	1.
change for better	1.
experience	1.
parking	1.
trained	1.

my job	
my job	FREQ
money	6.
good	4.
mechanic	2.
dirty	2.
like it	2.
rewarding	2.
knowledge	2.
fun	2.
work	2.
friends	2.
sometimes OK	1.
is a good job	1.
necessary	1.
security	1.
gratifying	1.
secure	1.
good service	1.
love it	1.
fantastic	1.
like	1.
I like it	1.
check	1.
position	1.
interesting	1.
quick	1.
better	1.
fulfilling	1.
prestige	1.
diagnose	1.
hard work	1.
pay	1.
pleasant	1.
happiness	1.
experiencing	1.
busy	1.
well	1.
more money	1.
challenging	1.
courteous	1.
road check	1.
good pay	1.
skill	1.
hands	1.
learnings	1.
ability	1.
fast	1.
on time	1.
training	1.
experiences	1.
needed	1.
coordination	1.
experience	1.
growing	1.
helpful	1.
different	1.
discipline	1.
useful	1.

my fringe benefits	
my fringe benefits	FREQ
good	3.
insurance	3.
are good	2.
fair	2.
OK	2.
vacation	2.
could be better	2.
none	2.
uniforms	2.
uneven	1.
laundry	1.
limited	1.
poor	1.
few	1.
above average	1.
money	1.
coffee	1.
fair at time	1.
holiday	1.
necessary	1.
short	1.
need more	1.
retirement	1.
experiencing	1.
getting better	1.
living	1.
deals	1.
Christmas party	1.
parking	1.
never enough	1.
helpful	1.
union	1.
loose	1.
cars	1.
bowling	1.
no work no pay	1.
sports	1.
good people to work with	1.

work pace used on my job	
work pace used	FREQ
fast	3.
clean	1.
OK	1.
is good at times	1.
average	1.
steady	1.
constant	1.
none	1.
demanding	1.
quick	1.
fast as possible	1.
unfair	1.
neat	1.
helpful	1.
hurried	1.
up to the person	1.
drive	1.
controls income	1.
skillful	1.
needed	1.
accurate	1.
faster	1.
GM nuts	1.
safe	1.
pushing	1.
rewarding	1.
pay	1.
necessary	1.
my own	1.
complete	1.
fastest	1.
contradictive	1.
set	1.
speed is money	1.
varies with job	1.
experience	1.

work methods used on my job	
work methods used	FREQ
air	2.

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work methods used on my job (continued)

tools	2.
knowledge	2.
speed	2.
clean	2.
could be improved	1.
OK	1.
various	1.
none	1.
normal	1.
bad	1.
pattern	1.
cleanliness	1.
fastest	1.
fast	1.
vary	1.
latest	1.
job well done	1.
sure	1.
experience	1.
trained	1.
modern	1.
quality	1.
safety	1.
time	1.
safe	1.
control	1.
not dictated	1.
thorough	1.
fairness	1.
training	1.
pride	1.
odds	1.
accuracy	1.
good	1.
ability	1.
neat	1.
money	1.
good health	1.

my coffeebreaks

my coffeebreaks	FREQ
short	4.
all day	2.
rest	2.
relaxing	2.
good	1.
any time	1.
none	1.
one	1.
necessary	1.
my time	1.
anytime	1.
when needed	1.
plenty	1.
when necessary	1.
sparce	1.
few	1.
donut	1.
after the job is done	1.
restful	1.
intermittent	1.
substitute	1.
helpful	1.
needed	1.
sometimes none	1.
pace breaking	1.
as needed	1.
OK	1.
talk	1.
little	1.
whenever necessary	1.
tense	1.
wonderful	1.
can't afford	1.
regular	1.
brake	1.
love coffee	1.
think	1.
below average	1.
slow me down	1.

interference with my job

interference-job	FREQ
none	4.
average	2.
break down of part	1.
all day	1.
no	1.
hardly none	1.
interruptions	1.
many	1.
not often	1.
sometimes	1.
cooperation	1.
OK	1.
weather	1.
money	1.
hours	1.
test drives	1.
waiting on parts	1.
equipment	1.
minimal	1.
tool	1.
management	1.
bad	1.
customer	1.
service writers	1.
necessary sometime	1.
time	1.
cleanliness	1.
decreases pay	1.
more time	1.
tools	1.
pollution	1.
coworkers	1.
more room	1.
parts department	1.

my pay

my pay	FREQ
good	6.
fair	4.
could be better	3.
varies	2.
not enough	2.
usually good	1.
commission	1.
too low	1.
is good	1.
low for work done	1.
low	1.
normal	1.
speed	1.
not so bad	1.
work hard	1.
so so	1.
pace	1.
hard hours	1.
care	1.
average	1.
overtime	1.
sometimes bad	1.
seasonal	1.
flexible	1.
not so good	1.
hard work	1.
new house	1.
better	1.
bad circumstances	1.
honest	1.
sometimes not enough	1.
satisfied	1.
clean	1.
clothes	1.
more	1.
too much taken out	1.
wife happy	1.

my opportunities to do a variety of tasks

variety of tasks	FREQ
good	6.
helpful	5.
necessary	3.
none	2.
excellent	2.
rewarding	2.
experience	2.
great	1.
always	1.
several	1.
sometimes	1.
yes	1.
plentiful	1.
not bored	1.
everything	1.
fair	1.
varied	1.
help others	1.
expected	1.
skill	1.
exciting	1.
cars	1.
different	1.
educational	1.
knowledge	1.
teaching	1.
required	1.
often	1.
beneficial	1.

my opportunities to do a variety of tasks

learning	1.
money	1.
ability	1.
demanded	1.
less boring	1.
trust	1.

freedom to use my own judgment at work

freedom-judgment	FREQ
good	6.
necessary	4.
yes	2.
helpful	2.
experience	2.
abiltiy	2.
must	1.
none	1.
help others	1.
some	1.
open	1.
occasionally	1.
limited	1.
excellent	1.
usually	1.
very good	1.
confidence	1.
most of the time	1.
at times	1.
great	1.
free	1.
OK	1.
skill	1.
speedy	1.
rewarding	1.
all the time	1.
restricted	1.
morale	1.
responsibility	1.
good deal	1.
sales	1.
trust	1.
good service	1.
money	1.
best	1.

my fellow workers

my fellow workers	FREQ
helpful	7.
friends	4.
good	4.
friendly	4.
nice	3.
kind	2.
good bunch	1.
for themselves	1.
are good	1.
good guys	1.
neat	1.
some good some bad	1.
companions	1.
helpful at times	1.
like to work with	1.
considerate	1.
normal	1.
willing to help	1.
neighbors	1.
average	1.
gossip	1.
competitors	1.
strange at times	1.
pushy	1.
close	1.
needed	1.
complain	1.
helpers	1.
good meachanics	1.
professional	1.
old	1.
trys	1.
politics	1.
stick together	1.
experienced	1.
young	1.
work together	1.
knowledgeable	1.
black	1.
white	1.

my working hours

my working hours	FREQ
OK	6.
good	4.
long	4.
fair	4.
eight to five	3.
too early	2.
vary	2.
are good	1.
eight to five thirty	1.
less	1.
off	1.
good deal	1.
hard	1.
up to person	1.
tiresome	1.
filled	1.
tiring	1.
few	1.
experience	1.
busy	1.
eight to five	1.
happy	1.
dirty	1.
school	1.
shorter hours	1.
no Saturdays	1.
rushed	1.
I like	1.
fun	1.
nine-and-one-half	1.
no Sundays	1.
friends	1.

feeling of accomplishment at work

accomplishment-work	FREQ
good	7.
money	3.
necessary	2.
none	1.
work well	1.
fair	1.
better day	1.
excellent	1.
great	1.
success	1.
pride	1.
fantastic	1.
confidence	1.
expected	1.
fulfilling	1.
self-accomplishment	1.
needed	1.
apparent	1.
appreciative	1.
rewarding	1.
more	1.
I fixed it	1.
job done	1.
demanded	1.
security	1.
aware	1.
pride	1.
raise	1.
challenge	1.
better	1.
ability	1.
peace of mind	1.
experience	1.
knowledge	1.
smart	1.

interaction with my coworkers

interaction-coworkers	FREQ
good	6.
friendly	4.
fair	3.
helpful	3.
necessary	2.
friends	2.
mixed	1.
yes	1.
none	1.
OK	1.
fun	1.
little	1.
average	1.
If I can	1.
I hope so	1.
time consuming	1.
mixing	1.
interesting	1.
happy	1.
when necessary	1.
good with some	1.
educational	1.
after work	1.
cooperative	1.

interaction with my coworkers (continued)

sometimes bad	1.
learning	1.
helping	1.

opportunities to help others in the community

help others-community	FREQ
good	2.
helpful	2.
plentiful	2.
knowledge	2.
service	1.
none	1.
I do	1.
expected	1.
try to	1.
large	1.
no time	1.
sometimes	1.
church	1.
safety	1.
are there	1.
above average	1.
most of time	1.
many	1.
reputation	1.
useful	1.
demanded	1.
too many	1.
inviting	1.
do a lot	
seldom	1.
meaningful	1.
friendly	1.
I do every day	1.
time	1.
when needed	1.
often	1.
rewarding	1.
welcomed	1.
wanted	1.
honestly	1.
necessary	1.
experience	1.
ask	1.
Saturdays	1.
care	1.
experiencing	1.
liked	1.
fun	1.

prestige of my job in the community

prestige-community	FREQ
none	5.
good	4.
good feeling	1.
trust me	1.
low	1.
poor	1.
OK	1.
some people	1.
excellent	1.
highly	1.
middle upper	1.
average	1.
fair	1.
confidence	1.
learned	1.
needed	1.
no	1.
helpful	1.
looked up to	1.
proud	1.
required	1.
helpful to them	1.
exciting	1.
lacking	1.

opportunities for self-fulfillment

self-fulfillment	FREQ
good	8.
money	3.
none	2.
rewarding	2.
OK	1.
enjoy what I do	1.
poor	1.
some	1.
often	1.
limited	1.
unlimited	1.
great	1.
lack	1.
work	1.
work money	1.
satisfaction	1.
like it	1.
time	1.
self-confidence	1.
necessary	1.
self-satisfaction	1.
challenging	1.
more	1.
challenge	1.
experience	1.
fun	1.
enjoy	1.
learning	1.
retirement	1.
looked up to	1.

my prestige at work

my prestige-work	FREQ
good	4.
average	2.
experience	2.
same as before	1.
none at all	1.
OK	1.
workmanship	1.
helpful	1.
low at times	1.
fine	1.
lacking	1.
building	1.
medium	1.
front end man	1.
transmition man	1.
OK	1.
skill	1.
good I think	1.
nice	1.
universal	1.
better	1.
getting better	1.
puppet man	1.
needed	1.
improving	1.
helpful	1.
attitude	1.
respecting	1.
friendly	1.
rewarding	1.

my job security

my job security	FREQ
good	4.
none	3.
fair	3.
insecure	2.
necessary	2.
I hope	1.
none at all	1.
performance	1.
what I make it	1.
limited	1.
decent	1.
excellent	1.
could be better	1.
improving	1.
worry	1.
knowledge	1.
benefits	1.
above average	1.
more work	1.
unknown	1.
not adequate	1.
health	1.
skill	1.
speed	1.
insured	1.
future	1.
retirement	1.
wanted	1.
age	1.
friendly	1.
good company	1.
needed	1.

supervisor's evaluation of my work

supervisor's evaluation	FREQ
good	8.
helpful	5.
necessary	3.
poor	2.

supervisor's evaluation of my work (continued)	
none	2.
could be better	1.
reliable	1.
lax	1.
limited	1.
above average	1.
sometimes excellent	1.
never enough	1.
comebacks	1.
well liked	1.
money talks	1.
stubborn	1.
punctual	1.
experience	1.

interaction with my supervisor	
interaction-supervisor	FREQ
good	8.
OK	3.
helpful	3.
none	2.
necessary	2.
very very poor	1.
improving	1.
cooperation	1.
personal	1.
compatible	1.
average	1.
interesting	1.
wanted	1.
helpfulness	1.
share	1.
bad	1.
friendly	1.
security	1.
funny	1.
conditions	1.
rushed	1.
fair	1.
environment	1.
promises	1.

my opportunities for promotion	
opportunities-promotion	FREQ
none	5.
good	2.
none at all	1.
fair	1.
politics	1.
slim	1.
pay	1.
bad here	1.
challenging	1.
speed increase	1.
poor	1.
average	1.
work hard	1.
money only	1.
not good	1.
some	1.
hoping to own business	1.
plentiful	1.
not much	1.
helpful	1.
sometimes	1.
very little	1.
in a few years	1.
work	1.
speed	1.
work harder	1.
need more school	1.
few	1.
planning	1.

my self-confidence at work	
my self-confidence	FREQ
good	11.
necessary	4.
helpful	3.
training	2.
experience	2.
good at times	1.
need it	1.
none	1.
OK	1.
the best	1.
sure	1.
perfect	1.
could be better	1.
fair	1.
some jobs	1.
evident	1
must be developed	1.
learning	1.
don't worry	1.
speed	1.
no shakes	1.
best	1.
correct	1.
work on anything	1.
wanted	1.
safe	1.
sometimes	1.
try it	1.
easier	1.
knowledge	1.
schooling	1.

my supervisor's ability to handle people	
sup-handle people	FREQ
good	9.
fair	5.
OK	3.
helpful	2.
questionable	1.
art	1.
poor	1.
necessary	1.
soft	1.
needs some improvement	1.
very good	1.
yes	1.
very limited	1.
unbiased	1.
busy	1.
required	1.
experience	1.
hot tempered	1.
experienced	1.
selling	1.
time consuming	1.
knowledge	1.
necessary	1.
stubborn	1.
knowledgeable	1.
important	1.
intelligent	1.
wanted	1.
unthinking	1.
know how	1.
right	1.

my competence at work	
competence at work	FREQ
good	7.
necessary	3.
none	2.
fast	2.
fair	2.
must	1.
some	1.
yes	1.
helpful	1.
steady	1.
hard	1.
self	1.
very necessary	1.
varied	1.
nerves	1.
fulfilling	1.
work	1.
parts	1.
clean	1.
evident	1.
habit	1.
interesting	1.
reliable	1.

daydreaming at work	
daydreaming-work	FREQ
no	4.
none	3.
sometimes	3.
seldom	2.
yes	1.
hell no	1.
passing time	1.
little	1.
no time	1.
dangerous	1.
bad habits	1.
vacation	1.
not good	1.
can't	1.
goals	1.
busy	1.
pay cut	1.
too busy	1.
danger	1.
wishful	1.
immature	1.
mess up	1.
coworkers	1.

daydreaming at work (continued)	
woman	1.
unsatisfactory	1.
office girls	1.
bad work	1.
girls	1.
legs	1.
time to leave	1.
coffeebreak	1.

my opportunities to do challenging work	
challenging-work	FREQ
good	5.
great	4.
always	2.
must	1.
sometimes	1.
none	1.
daily	1.
limited	1.
fair	1.
do my best	1.
each job	1.
helps	1.
many	1.
confidence	1.
poor	1.
necessary	1.
varied	1.
work hard	1.
every day	1.
experiencing	1.
every job is challenge	1.
knowledge	1.
helpful	1.
fun	1.
fast	1.
liked	1.
ability	1.
unlimited	1.
better	1.
learning	1.
a lot	1.
faster	1.

equipment used on my job	
equipment used	FREQ
fair	3.
old	3.
necessary	3.
jack	2.
helpful	2.
mine	2.
bench	2.
my tools	1.
not adequate	1.
OK	1.
my own	1.
modern	1.
new	1.
expensive	1.
broken	1.
not furnished	1.
useful	1.
cleaning solvent	1.
outdated	1.
could be better	1.
old fashioned	1.
better upkeep on cars	1.
limited	1.
up to date	1.
dangerous	1.
accurate	1.
investment	1.
tools	1.
power tools	1.
air	1.
inadequate	1.
not enough	1.
speed	1.
special tools	1.
water	1.
safe	1.
speedy	1.
need more	1.
valuable	1.
box	1.
rack	1.
grease	1.
abundance	1.
better job	1.
creeper	1.
vice	1.
oil	1.
hammer	1.
gaskets	1.
lubricants	1.

moral "rightness" of my job	
moral "rightness"	FREQ
fair	4.
good	3.
necessary	2.
good when work's good	1.
poor	1.
self-conceit	1.
needed	1.
fine	1.
honest	1.
hard work	1.
helping	1.
peace of mind	1.
helps	1.
bad when work's bad	1.
expected	1.
not always	1.
evident	1.
work	1.
safety	1.
give	1.
performance	1.
helpful	1.
care	1.
overcharge	1.
possible	1.
pay	1.
right	1.
recognition	1.

my supervisor	
my supervisor	FREQ
helpful	6.
friendly	4.
good	2.
friend	2.
fair	2.
boss	2.
OK	2.
smart	2.
loud	1.
needs replaced	1.
pusher	1.
nice guy	1.
adequate	1.
moody	1.
do my best	1.
nice	1.
experience	1.
Fred	1.
Fred Patton	1.
ability	1.
needs more experience	1.
courteous	1.
understand	1.
understanding	1.
tries	1.
Mike	1.
Bob	1.
intelligent	1.
not a know it all	1.
likeable	1.
understanding	1.
promises	1.
Jim	1.
service writer	1.
neat	1.
comes through	1.
Bill	1.
responsive	1.
young	1.
crutch	1.
stinks at times	1.
alert	1.
independent	1.

company policies on my job	
company policies	FREQ
good	4.
fair	3.
OK	3.
on time	2.
clean	2.
helpful	2.
time	1.
changeable	1.
not enforced	1.
not reliable	1.
none	1.

company policies on my job (continued)

medicare	1.
liberal	1.
some good	1.
lunch	1.
practiced	1.
weak	1.
unfair	1.
strict	1.
do the job	1.
improvement	1.
tight	1.
good job	1.
understanding	1.
fast	1.
some bad	1.
quitting	1.
stretch	1.
varies	1.
needed	1.
help	1.
useful	1.
customer	1.
warranty	1.
vacation	1.
depends	1.
benefits	1.
accurate	1.
kindness	1.
parties	1.
rules	1.
safety	1.
coffee	1.
vacations	1.

use of my abilities at work

use of abilities	FREQ
good	3.
all	3.
total	2.
helpful	2.
yes	2.
always	2.
learning	2.
must	1.
none	1.
universal	1.
limited	1.
often	1.
capable	1.
need	1.
need more training	1.
wasted	1.
challenged	1.
more	1.
necessary	1.
taxing	1.
experience	1.
accepting	1.
speed	1.
everyday	1.
learn	1.
common sense	1.
improved	1.
reliable	1.
exercise	1.
wanted	1.

recognition for my work

recognition-work	FREQ
none	3.
good	2.
by others	2.
necessary	2.
money	2.
experience	2.
helpful	2.
little	1.
training	1.
earned	1.
fair	1.
no	1.
better job	1.
occasionally	1.
very good	1.
pay	1.
fare	1.
needed	1.
truthful	1.
must	1.
could be better	1.
self	1.
rewarding	1.
speedy	1.
prizes	1.
not by top men at	1.
wanted	1.
knowledge	1.
complete	1.
want	1.
indifferent	1.
proud	1.
slips	1.
schooling	1.
respect	1.
need	1.
often	1.
helps me	1.
overlooked	1.
should	1.
great	1.
has	1.
self-confidence	1.

handling of grievances on my job

handling-grievance	FREQ
poor	2.
good	2.
bad	1.
very poor	1.
none	1.
occasional	1.
seldom	1.
fairly	1.
work	1.
slow	1.
tiring	1.
personally	1.
accurate	1.
service writer	1.
fair	1.
talk	1.
helpful	1.
equally	1.
unfair at times	1.
come backs	1.
management	1.
manager	1.
needed	1.
wanted	1.
rationally	1.
good at times	1.
time loss	1.
union	1.
foreman	1.
necessary	1.
OK	1.

my control over work pace

control of pace	FREQ
none	4.
good	3.
necessary	3.
slow	2.
speed	2.
partial	1.
complete	1.
as fast as I care	1.
weak	1.
my own	1.
mine	1.
total	1.
pay	1.
bad	1.
means money	1.
accurate	1.
sometimes	1.
none by company	1.
absolute	1.
parts department	1.
controls income	1.
be sure of complaint	1.
fast	1.
pay check	1.
definitely	1.
clean	1.
entrance	1.
casual	1.
test drives	1.
service writers	1.

APPENDIX B-4

Experiment II: Computer Data Processors' Response Distribution, by Stimulus Phrase and Frequency

my opportunities for on-the-job training	
on-job-training	FREQ
good	11.
necessary	9.
helpful	8.
many	5.
needed	5.
excellent	4.
none	3.
experience	3.
everyday	2.
very good	2.
not enough	2.
OK	2.
knowledge	2.
variety	2.

me at work	
me at work	FREQ
busy	10.
happy	8.
helpful	7.
efficient	6.
friendly	6.
interested	4.
bored	4.
fast	4.
learning	4.
good	3.
reliable	3.
clean	3.
neat	3.
steady	2.
normal	2.
routine	2.
tired	2.
here	2.
fair	2.
productive	2.
content	2.
dissatisfied	2.
responsibility	2.
enjoyable	2.
honest	2.
concerned	2.
experience	2.
moody	2.
useful	2.
knowledgeable	2.

the union on my job	
union on my job	FREQ
none	30.
non-existent	4.
helpful	4.
unnecessary	4.
needed	3.
good	3.
close	2.
unneeded	2.
not good	2.
not wanted	2.
not needed	2.
benefits	2.
necessary	2.

my working conditions	
working conditions	FREQ
good	16.
fair	7.
clean	6.
pleasant	5.
important	5.
enjoyable	5.
excellent	4.
could be better	4.
improving	3.
crowded	3.
dirty	3.
bad	2.
comfortable	2.
safe	2.
unpressured	2.
pressure	2.
relaxed	2.
poor	2.
necessary	2.
light	2.
friendly	2.
morale	2.
OK	2.
warm	2.
space	2.

my overtime work	
my overtime work	FREQ
none	10.
necessary	10.
unnecessary	5.
very little	4.
infrequent	4.
no pay	4.
not much	3.
money	3.
compensation	2.
not compensated	2.
not necessary	2.
rare	2.
important	2.
worthwhile	2.
unfair	2.
helpful	2.
more money	2.
home	2.
time off	2.
occasionally	2.

my control over work methods	
control of methods	FREQ
none	5.
good	5.
necessary	5.
helpful	5.
limited	3.
yes	2.
reasonable	2.
speed	2.
average	2.
important	2.
little	2.
knowledge	2.
more	2.
fair	2.
experience	2.
training	2.
safety	2.

my job	
my job	FREQ
good	7.
money	7.
fun	6.
rewarding	6.
boring	5.
necessary	5.
interesting	5.
knowledge	5.
typing	4.
exciting	4.
satisfying	3.
work	3.
challenging	3.
training	3.
helpful	3.
enjoyable	3.
mechanic	2.
security	2.
dirty	2.
dull	2.
like it	2.
accuracy	2.
adequate	2.
secure	2.
bad	2.
ability	2.
important	2.
I like it	2.
pleasant	2.
fulfilling	2.
demanding	2.
future	2.
good pay	2.
needed	2.
busy	2.
experience	2.
friends	2.
skill	2.
pay	2.

my fringe benefits	
my fringe benefits	FREQ
helpful	12.
good	10.
insurance	9.
retirement	6.
vacation	6.
many	5.
adequate	4.
necessary	4.

my fringe benefits (continued)

OK	3.
none	3.
important	3.
fair	3.
are good	2.
medical insurance	2.
excellent	2.
hospitalization	2.
above average	2.
could be better	2.
great	2.
sick leave	2.
uniforms	2.
useful	2.
security	2..
walk	2.

work pace used on my job

work pace used	FREQ
fast	11.
steady	6.
slow	6.
varies	4.
hectic	4.
quick	3.
moderate	3.
average	2.
rapid	2.
speed	2.
accurate	2.
hurried	2.
varied	2.
confusing	2.
important	2.
pressure	2.
necessary	2.
easy	2.
rushed	2.

work methods used on my job

work methods used	FREQ
efficient	6.
good	5.
speed	3.
friendly	3.
fair	2.
OK	2.
vary	2.
neatness	2.
organization	2.
normal	2.
modern	2.
improvement	2.
tools	2.
knowledge	2.
necessary	2.
training	2.
supervision	2.
clean	2.
accuracy	2.
important	2.
easy	2.

my coffeebreaks

my coffeebreaks	FREQ
short	10.
necessary	8.
relaxing	7.
helpful	5.
good	4.
needed	4.
rest	3.
talk	3.
all day	2.
anytime	2.
few	2.
fair	2.
fun	2.
enjoy	2.
two	2.
enough	2.
useful	2.
friends	2.
enjoyable	2.
unsupervised	2.
think	2.

interference with my job

interference-job	FREQ
none	8
coworkers	3.
sometimes	2.
phones	2.
little	2.
personal problems	2.
average	2.
bad	2.
supervisor	2.
noise	2.
angry	2.
minimum	2.
unnecessary	2.

my pay

my pay	FREQ
good	14.
fair	9.
adequate	7.
could be better	5.
not enough	5.
inadequate	4.
average	4.
better	3.
is good	2.
varies	2.
sufficient	2.
low	2.
ample	2.
necessary	2.
satisfied	2.
security	2.

my opportunities to do a variety of tasks

variety of tasks	FREQ
good	13.
helpful	7.
necessary	6.
excellent	5.
interesting	5.
limited	4.
rewarding	3.
experience	3.
knowledge	3.
unlimited	3.
great	2.
none	2
plentiful	2.
fair	2.
many	2.
constantly	2.
often	2.
desired	2.
important	2.
boring	2.
required	2.
challenging	2.
learning	2.
daily	2.
enjoy	2.
ability	2.

freedom to use my own judgment at work

freedom-judgment	FREQ
good	10.
necessary	9.
limited	5.
helpful	5.
yes	4.
ability	4.
experience	3.
none	2.
adequate	2.
confidence	2.
most of the time	2.
great	2.
satisfying	2.
important	2.
encouraged	2.
responsibility	2.
rewarding	2.
often	2.
money	2.
trust	2.

my fellow workers

my fellow workers	FREQ
helpful	17
friendly	15.
good	10.
friends	6
nice	5.

my fellow workers (continued)

cooperative	4.
understanding	4.
OK	3.
unconcerned	3.
intelligent	3.
enjoyable	3.
considerate	3.
kind	3.
knowledgeable	3.
accurate	3.
varied	2.
normal	2.
fair	2.
likable	2.
fun	2.
experienced	2.
young	2.
competent	2.
great	2.
knowledgeable	2.
lazy	2.

my working hours

my working hours	FREQ
good	13.
long	9.
flexible	6.
fair	6.
OK	6.
busy	6.
eight to five	5.
satisfying	3.
vary	3.
enjoyable	3.
tiring	3.
standard	2.
acceptable	2.
filled	2.
too early	2.
necessary	2.
eight	2.

feeling of accomplishment at work

accomplishment-work	FREQ
good	14.
necessary	5.
great	4.
none	3.
pride	3.
money	3.
very good	2.
high	2.
confidence	2.
sometimes	2.
important	2.
occasionally	2.
fulfilling	2.
accurate	2.
worthwhile	2.

interaction with my coworkers

interaction-coworkers	FREQ
good	16.
friendly	13.
helpful	10.
necessary	10.
cooperative	4.
frequent	3.
fair	3.
important	3.
friends	3.
fun	3.
adequate	3.
enjoyable	3.
relaxing	3.
OK	2.
easy	2.
excellent	2.
infrequent	2.
interesting	2.
enjoy	2.

opportunities to help others in the community

help others - community	FREQ
many	5.
good	4.
knowledge	4.
helpful	4.
rewarding	4.
none	3.
often	3.
experience	3.
necessary	3.
service	2.
no time	2.
fair	2.
some	2.
limited	2.
sometims	2.
concern	2.
useful	2.
plentiful	2.
time	2.
ability	2.
willing	2.

prestige of my job in the community

prestige community	FREQ
none	6.
high	5.
good	5.
important	4.
excellent	3.
unimportant	3.
average	2.
fair	2.
little	2.
low	2.
proud	2.
adequate	2.
unknown	2.
satisfying	2.
helpful	2.
unconcerned	2.
necessary	2.

opportunities for self-fulfillment

self-fulfillment	FREQ
good	14.
necessary	4.
many	4.
none	3.
unlimited	3.
great	3.
important	3.
money	3.
rewarding	3.
experience	3.
poor	2.
limited	2.
few	2.
little	2.
satisfaction	2.
ability	2.
varies	2.
open	2.

my prestige at work

my prestige-work	FREQ
good	11.
little	5.
average	4.
low	3.
helpful	3.
adequate	2.
experience	2.
normal	2.
personality	2.
friendly	2.

my job security

my job security	FREQ
good	13.
important	8.
necessary	8.
excellent	4.
none	3.
fair	3.

my job security (continued)

insecure	2.
limited	2.
above average	2.
skill	2.
unimportant	2.
needed	2.
personality	2.

supervisor's evaluation of my work

supervisor's evaluation	FREQ
good	19.
helpful	7.
fair	5.
necessary	5.
none	4.
important	4.
poor	2.
excellent	2.
very good	2.
infrequent	2.
appreciative	2.
honest	2.
accurate	2.

interaction with my supervisor

interaction-supervisor	FREQ
good	20.
necessary	9.
helpful	8.
friendly	6.
OK	4.
important	4.
none	3.
understanding	3.
cooperative	3.
personal	3.
compatible	2.
average	2.
great	2.
very good	2.
cooperation	2.
getting better	2.
honest	2.
fair	2.
kind	2.
limited	2.

my opportunities for promotion

opportunities-promotion	FREQ
none	8.
good	4.
few	3.
fair	2.
nil	2.
possible	2.
hopeful	2.
ability	2.
pay	2.
work	2.
improbable	2.
many	2.
knowledge	2.
accuracy	2.
bad	2.
desired	2.
experience	2.
advancement	2.
education	2.
limited	2.

my self-confidence at work

my self-confidence	FREQ
good	21.
necessary	8.
knowledge	7.
helpful	5.
experience	5.
fair	4.
important	4.
performance	4.
training	4.
ability	3.
sometimes	3.
none	2.
high	2.
varies	2.
could be better	2.
knowing	2.
learning	2.
essential	2.
responsible	2.

my supervisor's ability to handle people

supervisor-handle people	FREQ
good	15.
fair	11.
necessary	6.
great	5.
poor	3.
very good	3.
helpful	3.
important	3.
OK	3.
tactful	3.
adequate	3.
friendly	3.
easy	3.
understanding	3.
bad	2.
capable	2.
training	2.
not good	2.
experience	2.
objective	2.
calm	2.
strong	2.

my competence at work

competence at work	FREQ
good	21.
necessary	5.
adequate	4.
fair	4.
none	3.
helpful	3.
fast	3.
excellent	3.
experience	3.
high	2.
average	2.
knowledge	2.
important	2.
increasing	2.
satisfying	2.
confidence	2.
efficient	2.

daydreaming at work

daydreaming-work	FREQ
none	6.
no	5.
sometimes	5.
no time	5.
seldom	3.
little	3.
boredom	3.
infrequent	3.
impossible	2.
easy	2.
very little	2.
necessary	2.
busy	2.
never	2.
not often	2.
too busy	2.
rare	2.

my opportunities to do challenging work

challenging work	FREQ
good	9.
great	6.
limited	5.
many	4.
important	4.
always	3.
infrequent	3.
knowledge	3.
necessary	3.
varied	3.
sometimes	2.
none	2.
frequent	2.
fun	2.
satisfying	2.
like more	2.
confidence	2.
ability	2.
unlimited	2.

equipment used on my job

equipment used	FREQ
typewriter	8.
necessary	7.
good	6.
new	6.
computer	5.
modern	5.
phone	5.
adequate	4.
old	4.
excellent	4.
paper	4.
helpful	4.
fair	3.
pencils	3.
adding machine	3.
fast	3.
jack	2.
limited	2.
not enough	2.
useful	2.
pens	2.
inadequate	2.
mind	2.
fun	2.
efficient	2.
important	2.
reliable	2.
mine	2.
dictaphone	2.
knowledge	2.
interesting	2.
files	2.
bench	2.
postage machine	2.
books	2.

moral "rightness" of my job

moral "rightness"	FREQ
good	9.
fair	6.
necessary	5.
honest	3.
helpful	3.
helping	3.
importance	2.
questionable	2.

my supervisor

my supervisor	FREQ
friendly	12.
helpful	11.
fair	8.
good	6.
intelligent	5.
OK	5.
considerate	5.
kind	4.
friend	4.
nice	4.
knowledgeable	4.
boss	3.
understanding	3.
easy going	3.
great	3.
efficient	3.
experience	2.
thoughtful	2.
neat	2.
experienced	2.
responsive	2.
smart	2.
dependable	2.

company policies on my job

company policies	FREQ
good	9.
fair	8.
OK	4.
necessary	4.
flexible	3.
unfair	3.
on time	2.
not enforced	2.
reasonable	2.
changeable	2.
lenient	2.
strict	2.
clean	2.
fine	2.
important	2.
helpful	2.
agreeable	2.

use of my abilities at work

use of abilities	FREQ
good	6.
helpful	6.
limited	5.
necessary	4.
all	3.
yes	3.
always	3.
learning	3.
speed	3.
total	2.
try	2.
knowledge	2.
accuracy	2.
rewarding	2.
potential	2.
wasted	2.
responsibility	2.
frustration	2.

recognition for my work

recognition-work	FREQ
good	5.
helpful	5.
necessary	5.
none	4.
some	3.
little	3.
normal	3.
adequate	3.
respect	3.
pay	2.
by others	2.
salary	2.
appreciation	2.
money	2.
monetary	2.
important	2.
experience	2.
rewarding	2.
often	2.
supervisor	2.
ego	2.
needed	2.
frequent	2.
promotion	2.
wanted	2.
advancement	2.
appreciative	2.

handling of grievances of my job

handling grievance	FREQ
poor	6.
understanding	5.
fair	5.
good	3.
adequate	3.
necessary	3.
talk	3.
channels	3.
seldom	2.
few	2.
slow	2.

my control over work pace

control of pace	FREQ
necessary	8.
good	7.
none	6.
complete	4.
speed	4.
slow	3.
mine	2.
excellent	2.
time	2.
efficient	2.
knowledge	2.
flexible	2.
important	2.
deadlines	2.

APPENDIX B-5

Experiment II: Secretaries' Response Distribution,
by Stimulus Phrase and Frequency

opportunities for on-the-job training

on-job-training	FREQ
necessary	5.
helpful	4.
good	3.
needed	3.
none	2.
many	2.
keypunching	1.
excellent	1.
slight	1.
learning	1.
important	1.
nil	1.
completed	1.
youthful	1.
working	1.
some	1.
should be after	1.
different procedure	1.
bookkeeping	1.
desirable	1.
possible	1.
sufficient	1.
learn by mistakes	1.
being taught	1.
unavailable	1.
aptitude	1.
listening	1.
inadequate	1.
not offered	1.
changes	1.
new skills	1.
personnel relations	1.
unnecessary	1.
probable	1.
watching others	1.
vital	1.
possibly useful	1.
better	1.
enthusiasm	1.
doing	1.
acceptable	1.
necessary important	1.
meet deadlines	1.
advancement	1.
public relations	1.
experience	1.
uncertain	1.
participating	1.
enjoyable	1.
no organization	1.
concerned	1.
questioning	1.
good experience	1.
ability to learn	1.
long	1.

me at work

me at work	FREQ
busy	5.
bored	4.
happy	4.
helpful	4.
interested	3.
friendly	3.
dissatisfied	2.
efficient	2.
enjoyable	2.
concerned	2.
moody	2.
routine	1.
trying hard	1.
music	1.
conscientious	1.
hours	1.
hard	1.
tired	1.
steady	1.
pleasant	1.
love it	1.
always here	1.
unsatisfied	1.
need improvement	1.
long	1.
working	1.
feeling good	1.
controlled	1.
unhappy	1.
helped me grow	1.
rarely late	1.
seif confidence	1.
job	1.
experienced	1.
nice	1.
neat	1.
content	1.
hurry	1.
learning	1.
busy	1.
opportunities	1.
relating to people	1.
little time off	1.
responsibility	1.
engrossed	1.
congenial	1.
reliable	1.
frustrated	1.
inquisitive	1.
sometimes uptight	1.
restless inside	1.
quasi-efficient	1.
show ambition	1.
enjoy learning	1.
ask few favors	1.
satisfaction	1.
useful	1.
baffled at times	1.
co-workers	1.
best of my ability	1.
liking it	1.
limitations	1.
concentration	1.
enjoy working	1.
telephone	1.
released	1.
getting work done	1.
challenged	1.
knowledgeable	1.
I'm important	1.
people	1.
doing something	1.
ability	1.
personality better	1.

the union on my job

union on my job	FREQ
none	11.
helpful	2.
good	2.
necessary	2.
needed	1.
non-existent	1.
civil service	1.
indifferent	1.
cooperation	1.
important	1.
none in office	1.
efficient	1.
bad	1.
non-functioning	1.
organization	1.
together	1.
not necessary	1.
enthusiastic	1.
glad	1.
undesired	1.
should have one	1.
better without	1.
non-productive	1.
joining	1.
fair	1.
not desirable	1.
collective	1.
not needed	1.
wasted time	1.
compliance	1.
little known	1.
fine as is	1.
kills initiative	1.
concerned	1.
rewarding	1.
disagreeable	1.

my working conditions

working conditions	FREQ
good	5.
pleasant	4.
enjoyable	4.
clean	2.
unpressured	2.
light	2.
friendly	2.
warm	2.
very good	1.
adequate	1.
excellent	1.
hot	1.
confining	1.
bad	1.

my working conditions (continued)	
fair	1
great	1.
beautiful	1.
crowded	1.
alright	1.
need improvement	1.
compatible	1.
nice office	1.
equipment	1.
typewriter	1.
good equipment	1.
dirty	1.
not efficient	1.
undesirable	1.
quiet	1.
comfortable	1.
need improvement	1.
neat	1.
office small	1.
easy to adjust to	1.
nice desk	1.
lighting	1.
easy	1.
semi-clean	1.
satisfying	1.
co-workers good	1.
confusion	1.
demanding	1.
challenging	1.
attitude	1.
interesting	1.
windowless	1.
orderly	1.
lighting terrible	1.
good machines	1.
heating	1.
convenient	1.
pressure	1.
complaint	1.
relaxing	1.
cooperative	1.
distracting	1.
clear instruction	1.
little storage space	1.
facilities	1.
unfair	1.
bright	1.
nice	1.
file neatly	1.
CE	1.
plants	1.
supervisor	1.
like noise	1.
likable	1.
understanding	1.
great co-workers	1.

my overtime work	
my overtime work	FREQ
none	4.
very little	3.
infrequent	3.
compensation	2.
not necessary	2.
rare	2.
unnecessary	2.
unfair	2.
necessary	2.
discouraged	1.
non-existent	1.
sometimes	1.
little	1.
not much	1.
usually none	1.
don't mind	1.
worthwhile	1.
willing if needed	1.
willing	1
hurried	1.
quiet	1.
few	1.
willingness to stay	1.
seldom	1.
company time	1.
enjoy	1.
if needed	1.
no pay	1.
if have to	1.
get job done	1.
sometimes at home	1.
extra	1.
time off	1.
strain	1.
not become a habit	1.
nice	1.
home	1.
complete swiftly	1.
no interference	1.
never	1.
inconvenient	1.
busy	1.
unlimited	1.
not bothersome	1.
sometimes impossible	1.
housework	1.
undesired	1.
waste time	1.
accomplish more	1.
rush	1.
not enough	1.
needed	1.
LE	1.
hours	1.
occasionally	1.

my control over work methods	
control of methods	FREQ
important	2.
necessary	2.
good	2.
able	1.
judgment	1.
liberal	1.
sometimes	1.
moderate	1.
pace	1.
none	1.
proper	1.
frequent	1.
reasonable	1.
is good	1.
manual	1.
knowledge	1.
suggestions taken	1.
limited	1.
using own judgment	1.
progressive	1.
conscientious	1.
limitless	1.
guidelines	1.
satisfying	1.
speed	1.
cooperative effort	1.
little	1.
average	1.
adaptable	1.
experienced	1.
more	1.
procedures	1.
control	1.
more than usual	1.
standard procedure	1.
ability to change	1.
instructions	1.
programmed	1.
well done	1.
fairly easily	1.
methodical	1.
helpful	1.
bureaucracy	1.
know how	1.
make suggestions	1.
format	1.
interesting	1.
concentrating	1.
calmness	1.
precise	1.
dictated	1.
training	1.
scheduled	1.
self-reliance	1.
lots	1.
careful	1.
filing procedures	1.
follow rules	1.
precision	1.

my job	
my job	FREQ
typing	4.
interesting	4.
boring	3.
necessary	3.
rewarding	3.
dull	2.
good	2.
exciting	2.
important	2.

my job (continued)

fun	2.
challenging	2.
enjoyable	2.
knowledge	2.
clerk	1.
security	1.
routine	1.
could be better	1.
telephone	1.
tension	1.
ability	1.
happy	1.
answer phone	1.
same	1.
work	1.
bad	1.
job	1.
too general	1.
diversified	1.
material	1.
deadlines	1.
attitude	1.
phone work	1.
self-confidence	1.
general ledger	1.
detailed	1.
tedious	1.
successful	1.
sporadic	1.
satisfying	1.
demanding	1.
evaluation	1.
down grading	1.
constant	1.
pleasant	1.
average	1.
like the boss	1.
dictation	1.
responsibility	1.
payroll	1.
lengthy	1.
picky	1.
experience	1.
variable	1.
I like it	1.
unstructured	1.
pressure	1.
underestimated	1.
figures	1.
file	1.
instruction	1.
handling correspondence	1.
meeting others	1.
appointments	1.
mistakes	1.
cutting	1.
unfairness	1.
letters	1.
type-	1.
handling	1.
helpful to others	1.
personnel	1.
confidence	1.
pasting	1.
lists	1.
busy	1.
skill	1.
some routine	1.
limitations	1.
promotions	1.
pay	1.

my fringe benefits

my fringe benefits	FREQ
helpful	6.
good	5.
insurance	4.
many	3.
retirement	3.
vacation	3.
necessary	3.
medical insurance	2.
important	2.
adequate	2.
intricate	1.
excellent	1.
some	1.
hospitalization	1.
life insurance	1.
moderate	1.
numbered	1.
expensive	1.
great	1.
meet people	1.
away from home	1.
surprising	1.
wrong type	1.
sick leave	1.
worth working for	1.
desirable	1.
routine	1.
opinions	1.
security	1.
rewarding	1.
sickpay	1.
civil servant	1.
payroll savings	1.
state	1.
useful	1.
other people	1.
best	1.
different	1.
goal	1.
average	1.
late when necessary	1.
sick pay	1.
extra	1.
economical	1.
glamour	1.
outstanding	1.
gets better	1.
best yet	1.
Christmas bonus	1.

work pace used on my job

work pace used	FREQ
slow	5.
fast	4.
steady	3.
moderate	3.
varied	2.
hectic	2.
rushed	2.
as work is needed	1.
efficient	1.
sometimes lousy	1.
rapid	1.
changing	1.
mine	1.
different	1.
average	1.
extremely fast	1.
usually easy going	1.
varies	1.
type letters fast	1.
changeable	1.
interesting	1.
equal	1.
day-by-day	1.
sometimes slow	1.
unprogrammed	1.
try to regulate	1.
confusing	1.
important	1.
quick when necessary	1.
stable	1.
lots of pressure	1.
getting job complete	1.
sometimes pressure	1.
hurried	1.
enough	1.
controllable	1.
sometimes too much	1.
individual	1.
moderate	1.
spurts	1.
relaxed	1.
effective	1.
fixed by deadline	1.
knowledgeable	1.
phones interrupt	1.
not tiring	1.
easy	1.
normal	1.
dragging	1.
tense	1.
depends	1.
necessary	1.
ability	1.
differs	1.
undesired	1.
unimportant	1.
busy	1.
concerned	1.
desired at times	1.

work methods used on my job

work methods used	FREQ
efficient	5.
friendly	3.
neatness	2.
good	2.
improvement	2.
revised	1.
organized	1.
fair	1.
red tape	1.
sorting	1.
all	1.
adequate	1.
many	1.
channels	1.
detailed	1.
unorganized	1.
accuracy	1.
involved	1.
refined	1.
traditional	1.
planning	1.
unstructured	1.
different	1.
helpful	1.
careful	1.
smiling	1.
somewhat cumbersom	1.
orderly	1.
supervisor	1.
good follow up	1.
eatablish own	1.
speed	1.
cooperative	1.
competent	1.
questionable	1.
forms	1.
variety	1.
speaking	1.
cooperation	1.
rearrangement	1.
necessary	1.
precise	1.
questioning	1.
important	1.
structured	1.
systematic	1.
too much red tape	1.
easy	1.
messy	1.
concentration	1.
evaluation	1.
self-developed	1.
varied	1.
repetitious	1.
knowledgeable	1.
exceptions	1.
handling people	1.
at times inadequate	1.
productive	1.
concerned	1.

my coffeebreaks

my coffeebreaks	FREQ
necessary	5.
short	4.
good	3.
friends	2.
talk	2.
relaxing	2.
needed	2.
helpful	2.
twice a day	1.
semi-strict	1.
release	1.
adequate	1.
taken	1.
rest	1.
not many	1.
intervals	1.
fun	1.
morning	1.
free	1.
desk	1.
use common sense	1.
are flexible	1.
don't have	1.
very good	1.
chance to relax	1.
fair	1.
quiet	1.
enough	1.
whenever needed	1.
brief	1.
unsupervised	1.
irregular	1.
gossipy	1.
nice	1.
ideas	1.
refreshing	1.
enjoy	1.
not regimented	1.
discuss family	1.
welcome	1.
two	1.
allowable	1.
walk	1.
unscheduled	1.
when I want	1.
small	1.
too short	1.
enjoyable	1.
telephone	1.
relaxing	1.
not structured	1.
break	1.
make phone call	1.
work load	1.
time	1.
interesting	1.
working	1.
discuss	1.
change	1.
hate short breaks	1.
relax	1
not set time	1
unfair at times	1
information	1
not always necessary	1
coworkers	1
laugh	1
think	1
not authorized	1.
rewarding	1.
respite	1.
relief	1.
calm	1.
not always time	1.

interference with my job

interference-job	FRE
phones	2
none	2.
noise	2.
coworkers	1.
often	1.
breaks	1.
problems	1.
occasionally	1.
varied	1.
too many	1.
aspirations	1.
unrelated errands	1.
little	1.
personal problems	1.
questionable	1.
not necessary	1.
hardly any	1.
salesmen	1.
superiors	1.
distracting	1.
people	1.
sickness sometimes	1.
distracts	1.
supervisor	1.
ideas	1.
aggravating	1.
reject	1.
distractions	1.
could-eliminated	1.
nearby conversation	1.
visiting in office	1.
telephone calls	1.
socializing	1.
telephone	1.
inefficient	1.
staff	1.
education	1.
annoying	1.
angry	1.
self improved	1.
show attention	1.
talking	1.
confusion	1.
visitors	1.

inteference with my job (cont'd)	
independent	1.
outside	1.
can cope with	1.
redoing	1.
professors	1.
unnecessary	1.
daydreaming	1.

my pay	FREQ
my pay	7.
average	2.
better	2.
fair	2.
not enough	2.
regular	1.
sufficient	1.
income	1.
small	1.
little	1.
unconcerned	1.
is good	1.
according to ability	1.
should be higher	1.
up to standard	1.
inadequate	1.
ability to live	1.
more than ever	1.
factor vital	1.
need more	1.
adequate	1.
more raises	1.
satisfied	1.
need raise	1.
not by merit	1.
not automatic	1.
inappropriate to job	1.
relieving	1.
low	1.
security	1.
support child	1.
helps	1.
measure	1.
unimportant	1.
rewarding	1.
advancement	1.
adequate for job	1.
service	1.
satisfying	1.
realistic	1.
happy	1.
saving	1.
should comply	1.
worth	1.
proud	1.
could be better	1.
increase	1.
mine	1.

my opportunities to do a variety of tasks	FREQ
variety of tasks	4.
interesting	3.
good	2.
constantly	2.
desired	2.
important	2.
limited	2.
necessary	2.
challenging	2.
daily	2.
unlimited	2.
very many	1.
seldom	1.
numbered	1.
adequate	1.
assignments	1.
lots	1.
medium	1.
enjoyable	1.
definitely	1.
great	1.
average	1.
show ability	1.
every day	1.
too many	1.
w[illegible]-by-week	1.
type	1.
outstanding	1.
importance	1.
show knowledge	1.
acceptable	1.
not dull	1.
helping others	1.
obtainable	1.
experience	1.
different people	1.
read	1.
stimulating	1.
rewarding	1.
enjoy	1.
interested	1.
accomplish more	1.
variety	1.
fluctuating	1.
call	1.
alertness	1.
learning	1.
unstructured	1.
complete	1.
sometimes by myself	1.
helpful	1.
supervisor	1.
advancement	1.
department	1.
ability	1.

freedom to use my own judgment at work	FREQ
freedom-judgment	4.
limited	2.
often	2.
necessary	2.
ability	1.
check with boss	1.
sometimes	1.
confined	1.
good	1.
a lot	1.
moderate	1.
none	1.
frequently	1.
confidence	1.
most usually	1.
constantly	1.
very open	1.
varies	1.
most of the time	1.
great	1.
yes	1.
unimportant	1.
wanted	1.
responsibility	1.
no other way	1.
good feeling	1.
likeable	1.
like	1.
feel important	1.
desired	1.
completion	1.
more helpful	1.
make suggestions	1.
narrow	1.
needed	1.
good judgment	1.
competitive atmosphere	1.
helpful	1.
exercise	1.
capability	1.
initiative	1.
useful	1.
makes job better	1.
incentive	1.
excellent	1.
appreciative	1.
interaction	1.
experience	1.
competence	1.
motivation	1.
advancement	1.
communication	1.
not necessary	1.
trust	1.
no pressure	1.
personal satisfact	1.

my fellow workers	FREQ
my fellow workers	6.
helpful	6.
friendly	4.
good	3.
cooperative	2.
nice	2.
likeable	2.
understanding	2.
considerate	2.
unconcerned	2.

my fellow workers (cont'd)	
great	2.
knowledgeable	2.
lazy	2.
personality	1.
honest	1.
friends	1.
hard	1.
female	1.
OK	1.
fun	1.
good workers	1.
varied	1.
are amiable	1.
excellent	1.
mannerisms	1.
hard working	1.
distraction	1.
fair	1.
insane	1.
busy	1.
uninteresting	1.
fairly competent	1.
compatible	1.
enjoyable	1.
dull	1.
helping hand	1.
training good	1.
cleanliness	1.
release	1.
personable	1.
sometimes pushy	1.
small world	1.
routine	1.
mean	1.
offer assistance	1.
need college	1.
tactfulness	1.
responsible	1.
intelligent	1.
competent	1.
pre-occupied	1.
rewarding	1.
efficient	1.
irritable	1.
concerned	1.
make jobs clear	1.
sociable	1.
above average	1.
attendance	1.
easy going	1.
accurate	1.
same as me	1.
beneficial	1.
hard working	1.
easy to work with	1.
kind	1.
just	1.
important	1.
helpful	1.
could be better	1.
interesting	1.

my working hours	
my working hours	FREQ
good	6.
eight to five	2.
long	2.
flexible	2.
necessary	2.
eight	2.
busy	2.
fair	1.
adequate	1.
eight-to-five	1.
business-like	1.
fast	1.
standard	1.
acceptable	1.
fine	1.
good lunch hour	1.
sometimes past five	1.
tiring	1.
handy	1.
monday to friday	1.
forty	1.
frequent	1.
shorter	1.
filled	1.
long for me	1.
one hour lunch	1.
less breaks	1.
exertion	1.
early	1.
rush hour	1.
satisfying	1.
limiting	1.
weekly	1.
important	1.
efficient	1.
enjoyable	1.
semi productive	1.
five day week	1.
quit too late	1.
late	1.
not boring	1.
essential	1.
no daydreaming	1.
needed	1.
standardized	1.
productive	1.
concentration	1.
complicated	1.
relaxing	1.

feeling of accomplishment at work	
accomplishment-work	FREQ
good	4.
none	2.
great	2.
sometimes	2.
important	2.
worthwhile	2.
accurate	1.
moderate	1.
always	1.
work load	1.
little	1.
minimal	1.
confidence	1.
very good	1.
OK	1.
satisfying	1.
happier	1.
neat	1.
wholesome	1.
inadequate	1.
finish job on time	1.
getting things done	1.
supervisor	1.
desirable	1.
occasionally	1.
efficiency	1.
incomplete	1.
grateful	1.
from within	1.
new job	1.
helpful	1.
fulfilling	1.
others appreciate	1.
praise	1.
satisfactory	1.
scary	1.
frustrated at times	1.
helping	1.
necessary	1.
quantity	1.
gratifying	1.
appreciation important	1.
enjoy job more	1.
finish job	1.
average	1.
ego building	1.
being helpful	1.
showing ability	1.

interaction with my coworkers	
interaction-coworkers	FREQ
friendly	8.
good	7.
helpful	5.
necessary	4.
cooperative	2.
important	2.
adequate	2.
enjoyable	2.
congenial	1.
easy	1.
friendship	1.
ability	1.
constant	1.
nice	1.
frequent	1.
OK	1.
no	1.
tactful	1.

interaction with my coworkers (cont'd)	
moods	1.
overload	1.
get along	1.
difficult	1.
usually enjoyable	1.
not often socially	1.
complete	1.
responsive	1.
excellent	1.
changing	1.
helpful	1.
no fuss	1.
likeable	1.
fun	1.
sympathetic	1.
makes job tolerable	1.
knowledgeable	1.
improving daily	1.
mental	1.
efficient	1.
challenging	1.
personality	1.
relaxing	1.
amiable	1.
interested	1.
concerned	1.
paced	1.
knowledge gaining	1.
desirable	1.
confidence	1.
interesting	1.
assist	1.
many	1.
show ability	1.
unlimited	1.
agreeable	1.
experience	1.

opportunities to help others in the community	
help others-commun.	FREQ
knowledge	2.
often	2.
rewarding	2.
helpful	2.
acceptable	1.
fair	1.
enjoyable	1.
ample	1.
many	1.
nil	1.
none	1.
helping	1.
daily	1.
infrequent	1.
concern	1.
service	1.
some	1.
sometimes	1.
minimal	1.
experience	1.
giving information	1.
ego	1.
interested in	1.
would like	1.
information	1.
unrelated	1.
ability	1.
confidence	1.
adequate	1.
interested	1.
meeting people	1.
prestige	1.
unavailable now	1.
good feeling	1.
college community	1.
necessary	1.
willing	1.
good	1.
time	1.
desired	1.
warmth	1.
care about this	1.
satisfaction	1.
helping hand	1.
opportunity	1.
know how	1.
know when	1.

prestige of my job in the community	
prestige community	FREQ
important	4.
prestige community	3.
little	2.
unknown	2.
unimportant	2.
unconcerned	2.
necessary	2.
public relations	1.
undecided	1.
a lot	1.
employed	1.
good	1.
average	1.
none	1.
proud	1.
questionable	1.
knowledgeable	1.
satisfactory	1.
wasteful	1
adequate	1.
helping	1.
satisfying	1.
nebulous	1.
eager	1.
unsure	1.
ability	1.
helpful to others	1.
very helpful to all	1.
high	1.
helpful	1.
status	1.
training	1.
aid	1.
inflated	1.
don't need it	1.
not concerned	1.

opportunities for self-fulfillment	
self-fulfillment	FREQ
good	5.
few	2.
little	2.
important	2.
many	2.
gratitude by others	1.
inadequate	1.
none	1.
lots	1.
minimal	1.
complete	1.
excitable	1.
never end	1.
satisfaction	1.
frustrating	1.
wasted	1.
attempted	1.
satisfying	1.
accomplishment	1.
bad	1.
unhappy	1.
questionable	1.
busy	1.
helping	1.
need expression	1.
ability	1.
fantastic	1.
task you like	1.
helping others	1.
years	1.
trying	1.
job well done	1.
creative	1.
indifferent	1.
time drags	1.
productive	1.
finishing	1.
necessary	1.
desired	1.
knowledge	1.
great	1.
worthwhile tasks	1.
building confidence	1.
months	1.
possible	1.
appreciated	1.
individual	1.
small	1.
fulfillment	1.

opportunities for self-fulfillment (cont'd)	
responsibility	1.
concern	1.
use	1.
groping	1.
friendly	1.
not enough	1.
boundless	1.
interested	1.
rewarding	1.
gratifying	1.
experience	1.
satisfication	1.
completion	1.

my prestige at work	
my prestige-work	FREQ
little	4.
low	3.
average	2.
good	2.
none-everyone same	1.
non-existent	1.
none	1.
don't know	1.
limited	1.
minimal	1.
so-so	1.
important	1.
show ability	1.
self-concept	1.
peasant	1.
normal	1.
personality	1.
unfair	1.
unimportant	1.
more responsibility	1.
group	1.
receptionist	1.
unencouraged	1.
knowledgeable	1.
like it	1.
ability to cooperate	1.
appearance	1.
yet necessary	1.
not depended on	1.
meaningful	1.
desired	1.
friendly	1.
improves	1.
be considerate	1.
manner	1.
self-importance	1.
am capable	1.
increase	1.
ambitious	1.
confident attitude	1.
can cope	1.

my job security	
my job security	FREQ
necessary	5.
good	4.
important	3.
not absolute	1.
high	1.
there	1.
excellent	1.
yes	1.
payments	1.
questioned	1.
confident	1.
definite	1.
not sure	1.
great	1.
civil service	1.
most important	1.
satisfactory	1.
civil	1.
relative	1.
calm	1.
needed	1.
child	1.
not afraid	1.
relationships	1.
limited	1.
unshakeable	1.
hopeful	1.
unconcerned	1.
complete	1.
is important	1.
better work	1.
do a good job	1.
relief	1.
hard work	1.
not worried	1.
skills	1.
unfair	1.
helpful	1.
steady	1.
enjoyable	1.
unimportant	1.
not feared	1.
interesting job	1.
responsibility	1.
provided	1.
competent work	1.
[illegible]ey	1.
poor	1.
no problem	1.
rewarding	1.
listless	1.
personality	1.
freedom	1.
just	1.
appearance	1.
indifferent	1.

supervisor's evaluation of my work	
supervisor's evaluation	FREQ
good	7.
none	2.
appreciative	2.
important	2.
performance	1.
unspoken	1.
fair	1.
scattered	1.
have no complaints	1.
pretty good	1.
excellent	1.
helpful	1.
very good	1.
infrequent	1.
still learning	1.
progressive	1.
seldom	1.
necessary	1.
output	1.
sufficient	1.
He's satisfied	1.
unfair	1.
caring	1.
sometime[illegible]verrate	1.
thoughtf[illegible]	1.
no super[illegible]or	1.
well done	1.
excellent	1.
promoted	1.
satisfactory	1.
objective	1.
improve	1.
I'm satisfied	1.
bias or [illegible]ack of	1.
business-like	1.
considerate	1.
knows ability	1.
honest	1.
confidence	1.
intelligent	1.
competence	1.
professional	1.
complimentary	1.
concerned	1.
open	1.
adequate	1.
tactful	1.
beneficial	1.
[illegible]nows procedures	1.

interaction with my supervisor	
interaction-supervisor	FREQ
good	6.
friendly	4.
important	4.
cooperative	3.
necessary	3.
great	2.
honest	2.

interaction with my supervisor (cont'd)	
understanding	2.
helpful	2.
kind	2.
terrible	1.
limitless	1.
enough	1.
friends	1.
excellent	1.
sometimes	1.
getting better	1.
none	1.
very good	1.
tactful	1.
not much	1.
personalities	1.
easy	1.
OK	1.
personal	1.
superior	1.
fair	1.
watching	1.
acceptable	1.
to himself	1.
efficient	1.
knowledgeable	1.
prestige	1.
understanding	1.
not complete	1.
smooth	1.
complete	1.
should be developed	1.
unconcerned	1.
clear	1.
sufficient	1.
ease	1.
misunderstood	1.
likable	1.
appreciative	1.
open	1.
desired	1.
concern	1.
good when honest	1.
considerate	1.
more	1.
better	1.
nebulous at times	1.
not enough	1.
calm	1.
high priority	1.
ability	1.
work on own	1.
usual	1.
limited	1.
not tense	1.
daily	1.
closed	1.

my opportunities for promotion	
opportunities-prom.	FREQ
nil	2.
possible	2.
ability	2.
improbable	2.
knowledge	2.
experience	2.
education	2.
limited	2.
none	1.
hard	1.
very slow	1.
good	1.
security	1.
bad	1.
almost non-existent	1.
unsure	1.
scarce	1.
work ability	1.
have been promoted	1.
self-motivation	1.
few	1.
not sure	1.
usefulness	1.
supervisors	1.
bad system	1.
status quo	1.
hopeful	1.
most important	1.
dedication	1.
skills	1.
disapproved	1.
categories	1.
abilities	1.
meet qualification	1.
not worried	1.
efficiency	1.
personnel	1.
importance	1.
only upon transfer	1.
unavailable	1.
salary	1.
change jobs	1.
concern	1.
getting along	1.
performance	1.
boxes	1.
happy here	1.
same as others	1.
interest	1.
evaluation	1.
success	1.
responsibility	1.
desired	1.
advancement	1.
liking the job	1.
cooperation	1.
color	1.
prestige	1.
not automatic	1.
non shirking	1.
unfair	1.

my self-confidence at work	
my self-confidence	FREQ
good	4.
knowledge	4.
ability	3.
sometimes	2.
knowing	2.
important	2.
necessary	2.
performance	2.
high	1.
fair	1.
job experience	1.
none	1.
self-regulated	1.
all right	1.
calm	1.
improved	1.
with people	1.
different	1.
capable	1.
interesting	1.
friends	1.
successful	1.
eager	1.
own judgment	1.
shaky	1.
growing daily	1.
have training	1.
a lot	1.
experience	1.
understanding	1.
self-conscious	1.
handle situation	1.
built up	1.
interest	1.
know how	1.
poised	1.
satisfaction	1.
usually	1.
learning	1.
ability to learn	1.
helpful	1.
responsible	1.
objective	1.
competent	1.
inconsistent	1.
essential	1.
familiarity	1.
follow directions	1.
confident	1.
other people	1.
makes job easier	1.
building	1.
adequate	1.
need more	1.
masterful	1.
industrious	1.
justification	1.
forward	1.
nervous at times	1.

my supervisor's ability to handle people

sup. handle people	FREQ
great	4.
good	4.
fair	3.
tactful	3.
necessary	3.
friendly	3.
easy	3.
capable	2.
not good	2.
calm	2.
limited	1.
well	1.
bad	1.
very good	1.
forceful	1.
improve	1.
easy going	1.
gentle	1.
training	1.
desirable	1.
easily	1.
poised	1.
rough	1.
important	1.
salesman	1.
not concerned	1.
I help	1.
kindness	1.
self-assured	1.
objective	1.
determined	1.
firm	1.
experience	1.
handily	1.
helpful	1.
clients	1.
not knowledgeable	1.
thoughtfulness	1.
accuracy	1.
meaning	1.
tensed	1.
steady	1.
listens	1.
little ability	1.
knowledgeable	1.
speed	1.
adequate	1.
dependable	1.
could be better	1.
rock	1.
other-oriented	1.
not friendly	1.
knowing	1.
unsure	1.
likeable	1.
strong	1.
efficient	1.
perfectionist	1.

my competence at work

competence at work	FREQ
good	12.
satisfying	2.
personality	1.
trained	1.
little	1.
average	1.
necessary	1.
average skills	1.
is good	1.
knowledge of job	1.
accurate	1.
doubtful	1.
undependable	1.
adequate	1.
needed	1.
careful	1.
satisfying to others	1.
vital	1.
ability	1.
improving	1.
experienced	1.
skillful	1.
important	1.
complete	1.
will improve	1.
ability to perform	1.
neat	1.
coworkers	1.
fair	1.
somewhat patient	1.
getting work done	1.
helpful	1.
limited	1.
successful	1.
better	1.
poised	1.
knowledge	1.
taken for granted	1.
knowledgeable	1.
often tested	1.
honest	1.
attitude	1.
professional	1.
enough	1.
willing to learn	1.
handle people	1.
frequent	1.
usually	1.
capable	1.
enthusiastic	1.
unobserved	1.
excellent	1.
rapid	1.
dependable	1.
fragmented	1.
improved	1.
efficient	1.
concentration	1.
congenial	1.
moods	1.
progressive	1.
trust	1.

daydreaming at work

daydreaming-work	FREQ
no time	3.
none	2.
little	2.
infrequent	2.
usual	1.
seldom	1.
pastime	1.
impossible	1.
often	1.
a lot	1.
after hours	1.
monotony	1.
frequent	1.
when not busy	1.
sometimes	1.
easy	1.
needed sometimes	1.
not often	1.
no	1.
busy	1.
unnecessary	1.
hurried	1.
boredom	1.
summer	1.
fame	1.
time consuming	1.
occasionally	1.
bad	1.
preoccupied	1.
sunny	1.
not understandable	1.
not possible	1.
interruptions	1.
bored	1.
never	1.
restful	1.
boredom	1.
wondering	1.
distracting	1.
sometimes unavoid	1.
inefficient	1.
try not to	1.
break	1.
no work	1.
never quiet	1.
error	1.
discouraged	1.
time	1.
tired	1.
worry	1.
music	1.
unattentive	1.
rare	1.
work not done	1.
personal problems	1.
quiet	1.
boring job	1.
can't complete job	1.

my opportunities to do challenging work

challenging-work	FREQ
good	3.
infrequent	3.
limited	2.
many	2.
necessary	2.
important	2.
not too many	1.
seldom	1.
none	1.
restricted	1.
always	1.
charts	1.
nil	1.
to help	1.
generally	1.
bids	1.
great	1.
little	1.
knowledge	1.
do exist	1.
bookkeeping challenge	1.
desirable	1.
tedious	1.
occasionally	1.
experience	1.
handling students	1.
work well done	1.
co-workers	1.
day by day	1.
follow ups	1.
pride in work	1.
good work relation	1.
unexpected	1.
disappointment	1.
satisfying	1.
handling professor	1.
to know people	1.
competitive	1.
not much	1.
always	1.
hardly	1.
desired	1.
increase ability	1.
welcome	1.
hurried	1.
pleasing	1.
stimulation	1.
get around	1.
frustrating lack	1.
at times	1.
like more	1.
likeable	1.
endless	1.
secondary	1.
challenge	1.
could be better	1.
confidence	1.
thought provoking	1.
exciting	1.
director	1.
capable	1.
unlimited	1.

equipment used on my job

equipment used	FREQ
typewriter	8.
phone	5.
excellent	3.
good	3.
adding machine	3.
new	3.
necessary	3.
adequate	2.
pencils	2.
pens	2.
helpful	2.
paper	2.
important	2.
dictaphone	2.
files	2.
postage machine	2.
old	1.
not enough	1.
is good	1.
complete	1.
inadequate	1.
sufficient	1.
ability	1.
some antiquated	1.
repairs slow	1.
calculator	1.
modern	1.
borrowed	1.
duplication machine	1.
records	1.
no problems	1.
useful	1.
fun	1.
typewriter	1.
very necessary	1.
needed	1.
phones	1.
desk	1.
copy machine	1.
room	1.
rulers	1.
mind	1.
postage	1.
efficient	1.
paper punch	1.
convenient	1.
library	1.
telex	1.
file cabinets	1.
storage	1.
templates	1.
personality	1.
mimeographing	1.
attractive	1.
simple	1.
books	1.
card index	1.
steno machine	1.
knowledge	1.
reports	1.
durable	1.
card file	1.
copying equipment	1.
paper punch	1.
index file	1.
staple	1.
telephone directory	1.

moral "rightness" of my job

moral "rightness"	FREQ
good	4.
necessary	3.
helpful	2.
knowledge	1.
high	1.
classwork	1.
unimportant	1.
unfair	1.
importance	1.
meaningful	1.
definitely	1.
unrelated	1.
neatness	1.
OK	1.
very good	1.
fair	1.
helping students	1.
satisfying	1.
indispensible	1.
not an issue	1.
friendly	1.
acceptable	1.
conscientious	1.
indirect	1.
decent	1.
useful	1.
aid	1.
helping	1.
elsewhere	1.
concerned	1.
useful work	1.
beneficial	1.
helping hand	1.

my supervisor

my supervisor	FREQ
friendly	5.
considerate	4.
intelligent	3.
kind	3.
fair	2.
good	2.
thoughtful	2.
nice	2.
great	2.
knowledgeable	2.
helpful	2.
efficient	2.

my supervisor (cont'd)

personality	1.
personable	1.
interested	1.
male	1.
potential	1.
drifty	1.
overbearing	1.
is intelligent	1.
tactful	1.
loyal	1.
funny	1.
not overbearing	1.
neat	1.
English major	1.
unfair	1.
tries hard	1.
hard	1.
quiet	1.
concerned	1.
is fair	1.
responsible	1.
understanding	1.
good boss	1.
not managerial	1.
unsure of self	1.
lax	1.
even tempered	1.
skilled	1.
interesting	1.
works fast	1.
dependable	1.
considerate	1.
friend	1.
honest	1.
busy	1.
easy to work with	1.
unorganized	1.
lacks confidence	1.
calm	1.
ambitious	1.
is concerned	1.
polite	1.
cooperative	1.
hard-working	1.
easy to talk to	1.
two faced	1.
fun	1.
pleasant	1.
persistent	1.
I respect	1.
easy going	1.
excellent ability	1.
impartial	1.
helps	1.
unjust	1.
hurried	1.
agreeable	1.
understands	1.
no respect	1.
stable	1.
poised	1.
over worked	1.

company policies on my job

company policies	FREQ
necessary	3.
reasonable	2.
fair	2.
good	2.
unfair	2.
agreeable	2.
good attendance	1.
intricate	1.
questionable	1.
unwritten	1.
forms	1.
dress	1.
unstable	1.
many	1.
nebulous	1.
some silly	1.
all right	1.
fine	1.
lenient	1.
abide by them	1.
flexible	1.
good personality	1.
discouraging	1.
routine	1.
changeable	1.
strict	1.
action	1.
indifferent	1.
others good	1.
fair to good	1.
lenient	1.
important	1.
average	1.
show concern	1.
some rigid	1.
likeable	1.
accuracy	1.
involved	1.
superiors	1.
deadlines	1.
polite	1.
at times unrealistic	1.
enjoyable	1.
individual	1.
follow directions	1.
nice combination	1.
better for people	1.
speed	1.
status	1.
temper	1.
beneficial	1.
boss	1.
to much red tape	1.
good instruction	1.
limiting	1.
expensive	1.
not innovative	1.
interested	1.

use of my abilities at work

use of abilities	FREQ
helpful	4.
limited	3.
try	2.
rewarding	2.
keeping records	1.
good	1.
little	1.
always	1.
typing	1.
adequate for boss	1.
frequent	1.
steady	1.
important	1.
less than average	1.
filing	1.
increases	1.
getting things done	1.
willingness	1.
typing letters	1.
complete	1.
over competent	1.
constantly	1.
figuring	1.
knowledge	1.
varied	1.
challenging	1.
potential	1.
have more	1.
consistently	1.
type	1.
unnoticed	1.
following direction	1.
not used fully	1.
job done on time	1.
payroll	1.
experienced	1.
stagnant	1.
restricted	1.
necessary	1.
charting	1.
ready	1.
unfulfilling	1.
good	1.
no stimulation	1.
lack confidence	1.
shorthand	1.
wasted	1.
agreeable	1.
often misused	1.
getting along	1.
answer telephone	1.
frustration	1.
openness	1.
to help	1.
educators	1.
like a chance	1.

use of my abilities at work (cont'd)

best	1.
sociable	1.
cheerfulness	1.
concentrate	1.
supervisor	1.
deprived	1.
know how	1.
tactful	1.
used at times	1.
concerned	1.
friendly	1.

recognition for my work

recognition-work	FREQ
some	3.
appreciation	2.
helpful	2.
necessary	2.
gratitude of super	1.
seldom	1.
none	1.
granted	1.
constantly	1.
thanks	1.
well done	1.
pay	1.
unfair	1.
good	1.
fine	1.
boss	1.
grateful	1.
employer	1.
raises	1.
salary	1.
unexpected	1.
unrewarding	1.
inspiring	1.
appreciation	1.
showing it	1.
added responsibility	1.
limited	1.
unimportant	1.
confidence	1.
monetary	1.
little	1.
important	1.
infrequent	1.
exciting	1.
not enough	1.
company itself	1.
praise	1.
valued	1.
link	1.
unspoken	1.
payment	1.
seeing	1.
trust	1.
closed	1.
self-recognition	1.
thoughtfulness	1.
improving	1.
taken for granted	1.
appreciated	1.
people	1.
self satisfaction	1.
appearance	1.
knowing	1.
freedom	1.
supervisor	1.
unnecessary	1.
frequent	1.
morale building	1.
thankful	1.
coworkers	1.
respect	1.
boost	1.
attitude	1.
help	1.
director	1.
advancement	1.
personnel	1.
office services	1.

handling of grievances on my job

handling grievance	FREQ
channels	3.
fair	2.
understanding	2.
poor	2.
few	2.
adequate	2.
involved	1.
non-existent	1.
griping	1.
be gentle	1.
unfair	1.
should be private	1.
forget	1.
boss	1.
phone	1.
done fairly	1.
good	1.
time consuming	1.
status	1.
allowable	1.
correct	1.
control	1.
equitable	1.
unknown	1.
seldom	1.
talk it out	1.
all right	1.
knowledge	1.
people you contact	1.
tactful	1.
there aren't many	1.
willingness to listen	1.
worthless	1.
non-communications	1.
improve	1.
able to talk	1.
tenuous	1.
limited	1.
infrequent	1.
relax	1.
gene	1.
friendly	1.
handle best way	1.
petty	1.
advise	1.
one-sided	1.
talk	1.
self	1.
talk it over	1.
handled fast	1.
change	1.
slow	1.
supervisor	1.
ability to agree	1.
agreeable	1.

my control over work pace

control of pace	FREQ
good	2.
none	2.
speed	2.
efficient	2.
necessary	2.
deadlines	2.
variable	1.
excellent	1.
little	1.
able to handle	1.
changing	1.
complete	1.
high at times	1.
very good	1.
some	1.
inability	1.
time	1.
mine	1.
can work rapidly	1.
schedule	1.
assirt	1.
hectic	1.
no complaints	1.
usually good	1.
controlled	1.
knowledge	1.
work load	1.
own judgment	1.
boss sets pace	1.
uncontrollable	1.
other work	1.
concentration	1.
unique	1.
confidence	1.
possible	1.
enough	1.
lose control	1.
pushed	1.
abillty	1.
uneven	1.
rushed	1.
do well	1.
capable	1.
important	1.
get over excited	1.
inconsistent	1.
patients	1.
steady	1.
confusing	1.
planning	1.
interruptions	1.
desired	1.
control	1.
attendence	1.

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